APOTHECARIES'
EXAMINATION
QUESTIONS

EPB Supp/B
60554/B

£160 –

LEGE OF
ARY
SURGEONS

A
SERIES
OF
QUESTIONS AND ANSWERS

FOR THE
USE OF GENTLEMEN PREPARING FOR
THEIR EXAMINATION
AT
Apothecaries' Hall;
WITH
COPIOUS AND USEFUL TABLES ANNEXED.

SECOND EDITION,
CAREFULLY CORRECTED AND ENLARGED,

BY CHARLES MINGAY SYDER,
Lecturer on Medicine, Chemistry, &c.

LONDON:
OFRIDGE AND RACKHAM, STRAND;
HIGHLEY, FLEET STREET.

1823.

746

H 612

LONDON:
PRINTED BY COX AND BAYLIS, GREAT QUEEN STREET,
LINCOLN'S-INN FIELDS.

DEDICATION.

THIS

Little Work

IS

MOST RESPECTFULLY DEDICATED

TO THE

MEDICAL STUDENTS

OF THE METROPOLIS;

WITH

THE AUTHOR'S BEST WISHES

FOR THEIR

PROFESSIONAL SUCCESS.

London, August 12, 1823.

[illegible]

EXAMINATIONS

ON

CHEMISTRY, PHARMACY, BOTANY,

&c. &c.

Q. WHAT is chemistry?

A. The science which teaches the constituent parts of bodies, with reference to their nature, proportions, and method of combination.

Q. What is meant by decomposition?

A. The art of dividing a compound body into its simple elementary constituents, which is generally to be effected by the powers of heat and the assistance of substances governed by the laws of affinity.

Q. What are the constituents of chalk?

A. Lime and carbonic acid.

Q. What are the principles of carbonic acid?

A. Carbon and oxygen.

Q. What is carbon?

A. The base of all vegetable productions; in a purer state it exists in charcoal; it is found in animal and mineral substances: the diamond is the only instance of pure carbon.

Q. What are the elements of the atmospheric air?

A. Oxygen and nitrogen, about one per cent. of carbonic acid gas, with other adventitious substances, rendered aërial by the expansive properties of caloric.

Q. What part of the atmospheric air does the blood absorb?

A. The oxygen and caloric.

Q. What is nitrogen gas?

A. Nitrogen is an irrespirable, invisible, elastic gas, which neither supports life or combustion, and is a component part of all animal substances.

Q. Of what use is nitrogen in the atmospheric air?

A. It is considered that nitrogen has the power of rendering the oxygen gas fit for respiration.

Q. Is nitrogen a simple substance?

A. Sir Humphrey Davy calls it a compound of hydrogen and oxygen.

Q. What are the chemical compounds of nitrogen?

A. Combined with oxygen in varied proportions it forms nitrous oxide gas, nitrous gas, nitric acid gas, and nitrous acid gas.

Q. What is oxygen gas?

A. An invisible elastic fluid, with neither smell or taste, supporting life, combustion, and animal heat, and is considered the principle of acidity.

Q. What is meant by specific gravity?

A. A term used to denote the relative weight of bodies.

Q. What is caloric?

A. The name given by chemists to the matter of heat.

Q. What are the sources of caloric?

A. The sun's rays, percussion, friction, electricity, galvanism, and the mixture of substances.

Q. What are the effects of heat upon substances?

A. Expansion (alumina excepted), ignition, evaporation, fluidity, elasticity.

Q. What are the elements of water?

A. Hydrogen and oxygen.

Q. How can you account for the numerous substances differing so much in their nature, being formed of the same constituents?

A. By the varied proportions of each constituent principle.

Q. What are the elements of ammonia?

A. Hydrogen and nitrogen.

Q. How may alkalies be systematically arranged?

A. In three classes: 1st, those which consist of a metallic base with oxygen, *viz.* *soda,*—*potass,*—and *lithia;* 2d, That which has no oxygen, *ammonia;* 3d, those which contain hydrogen, oxygen, and carbon, as *aconita*, *morphia*, *cicuta*, and other vegetable alkalies.

Q. Why have potass and soda been called *fixed* alkalies?

A. Because they will endure an excessive heat without a decomposition of them being effected.

Q. What is ammonia?

A. A volatile alkali.

Q. What are the virtues of opium?

A. Narcotic, anodyne, and sedative.

Q. What are the virtues of acetic acid?

A. Anti-narcotic, anti-septic, and diaphoretic.

Q. In distilling vinegar what change takes place?

A. It is deprived of its colouring and mucillagenous matters, tartaric acid, or any adventitious substances it may contain.

Q. What are the preparations of acetic acid?

A. The liquor plumbi subacetatis, plumbi superacetas,—oxymel scillæ,—oxymel simplex,—liquor ammoniæ acetatis,—potassæ acetas,—acetum-colchici,—and emplastrum ammoniaci.

Q. How is acetic acid to be prepared?

A. Take of *vinegar* a gallon; let the acetic acid distil in a bath of sand from a glass retort into a glass receiver kept cold, then the first pint being rejected, keep the next six pints distilled.

Q. What are the constituents of acetic acid or distilled vinegar?

A. Carbon, hydrogen, oxygen (*forming pure acetic acid*) dissolved in water.

Q. What are the virtues of the sub-carbonate of ammonia?

A. Antacid, anti-spasmodic and stimulant; dose from ten grains to a scruple, used in dyspepsia, hysteria, syncope, &c. &c.

Q. Name the preparations of ammonia.

A. The ammoniæ sub-carbonas,—liquor ammoniæ,—liq: ammon: acetatis,—liq: ammon: sub-carbonatis,—ammoniæ murias,—spiritus ammoniæ,—sp: ammoni: aromaticus,—sp: ammon: fœtidus,—sp: ammon: succinatus.

Q. What are the virtues of muriate of ammonia?

A. Cathartic and diuretic, very seldom exhibited internally; but by its production of cold during its solution is used externally to allay inflammatory action.

Q. How is the ammoniæ sub-carbonas to be prepared?

A. Take of *muriate of ammonia* a pound, *dried prepared chalk* a pound and a half. Rub them separately into powder, then mix and sublime, the heat being gradually increased till the retort becomes red.

Q. What decomposition takes place in preparing sub-carbonate of ammonia?

A. *Muriate of ammonia* and *prepared chalk* being used; the lime of the chalk forms with the muriatic acid of the ammonia a *muriate of lime*, and the carbonic acid of the chalk is sublimed in combination with the ammonia: this is an instance of a double decomposition.

Q. What are acids?

A. Substances which impart to the tongue a sour taste, consisting of an acifiable base. in unison with the acidifying principle *oxygen.*

Q. What are the characteristic properties of acids?

A. They possess the power of changing the blue, green, and purple juices of vegetables to red; and in combination with alkalies, earths, or metallic oxides, they form various salts.

Q. What are the acids ordered to be prepared by the London *Pharmacopæia?*

A. The benzöic, citric, acetic, muriatic, nitric, and sulphuric acids.

Q. What acid is found in opium?

A. Meconic acid.

Q. In what does the narcotic principle of opium consist?

A. An alkaline salt formed of morphia and meconic acid.

Q. How is opium obtained?

A. By making incisions in the *capsules* of the *papaver somniferum,* from which it exudes, and is concreted by the sun.

Q. Name the preparations of opium.

A. The tinctura opii,—tinct: camphoræ composita

—confectio opii,—extractum opii,—pilulæ saponis cum opio, pulvis cornu usti cum opio,—pulv: cretæ compositus cum opio,—pulv: ipecacuanhæ compositus pulv: kino comp:, and emplastrum opii.

Q. What are the constituents of citric acid?

A. Carbon, oxygen, and hydrogen, with water of crystallization.

Q. What are the virtues of citric acid?

A. Antiseptic and refrigerant; dose from five grains to a drachm. vid fol 153

Q. Describe the method of making citric acid.

A. Take of *lemon-juice a pint*, *prepared chalk* an ounce, or as much as may be necessary to saturate the juice, *sulphuric acid* diluted nine fluid ounces. Add the chalk by degrees to the lemon-juice made hot, and mix, then pour off the liquor; wash the *citrate of lime* which remains with tepid water frequently renewed, then dry it; then pour the diluted sulphuric acid upon the dried powder, and boil for ten minutes; press the liquor strongly through linen and filter through paper, evaporate the liquor which shall have passed with a gentle heat, so that as it cools crystals may be formed. That the crystals may be pure, dissolve a second and third time in water, and as often strain it; boil down and set it aside.

Q. What is the theory of the process for making citric acid?

A. *Lemon-juice* and prepared *chalk* with diluted *sulphuric acid* are used. While the lime of the chalk forms with the lemon-juice an *insoluble citrate of lime*, the carbonic acid passes off; the sulphuric acid on being added to this, forms with the lime an *insoluble sulphate of lime* ; the *citric acid* is held in solution, and is obtained in crystals by evaporation.

Q. To what does ipecacuanha owe its active principle?

A. A substance called *emetine*, which when pure is of a reddish brown colour.

Q. What plant affords us ipecacuanha root?

A. The callicocca ipecacuanha.

Q. Name the preparations of ipecacuanha.

A. The pulvis ipecacuanhæ compositus, pulvis ipecacuanhæ, and vinum ipecacuanhæ.

Q. In what proportion does opium enter the pulv. ipec. comp.?

A. One grain of opium in ten of the powder.

Q. What are the virtues of the pulv. ipecacuanhæ compositus?

A. Anodyne and sudorific ; dose from two grains fifteen.

Q. What is the dose of the vinum ipecacuanhæ as an emetic?

A. From two fluid drachms to an ounce.

Q. What are the virtues of the pulvis ipecacuanhæ?

A. Emetic, expectorant, and diaphoretic.

Q. As an emetic, how much ipecacuanha would you exhibit to an adult?

A. From ten grains to a scruple.

Q. What are the component principles of benzöic acid?

A. Hydrogen, carbon, and oxygen.

Q. What are the virtues of benzoic acid?

A. Stimulant and expectorant; dose from ten grains to half a drachm.

Q. How is benzoic acid to be prepared?

A. Take of *benzoin* a pound and half, *fresh lime* four ounces, *water* a gallon and half, *muriatic acid* four fluid ounces. Rub the benzoin with the lime, then boil for half an hour in a gallon of the water, attentively stirring it with a rod, and pour off the liquor when cold; boil what remains again in four pints of the water, and pour off the liquor as before, boil down the liquors mixed together to one half; then filter through paper and drop in the muriatic acid gradually until no more be precipitated; lastly, the liquor being poured off, dry the powder by a gentle heat, and put it into a proper vessel placed on sand, then with a slow fire sublime the benzoic acid.

Q. What decompositions are effected in preparing benzoic acid?

A. *Gum benzoin,—lime,—water,* and *muriatic acid* are used. The lime forms with the benzoic acid of the gum (which it decomposes) a *benzoate* of *lime* in solution; this is again decomposed by the muriatic acid, which unites with the lime, forming a *muriate of lime*, and the benzoic acid being of itself insoluble, precipitates, and is then sublimed by the assistance of heat.

Q. What preparation does benzoic acid enter?

A. The tinctura camphoræ composita.

Q. What are the elements of muriatic acid gas?

A. Hydrogen and chlorine (or *oxymuriatic gas*).

Q. How is muriatic acid to be prepared?

A. Take of *muriate of soda* "(common salt)" two pounds, *sulphuric acid* (by weight) twenty ounces, *distilled water* a pint and half: Mix first the acid with half a pint of the water in a glass retort, and to this when cold add the muriate of soda; pour the remainder of the water into the receiver; the retort being applied, let the distilled muriatic acid pass over into this from a sand-bath, the heat being gradually increased until the retort becomes red. The specific weight of muriatic acid is to the specific weight of distilled water as 1,160 to 1,000. If into a fluid ounce of this diluted with water a piece of lime be thrown, two hundred and twenty grains ought to be dissolved.

Q. What are the chemical changes in the process for making muriatic acid?

A. *Muriate of soda*, *sulphuric acid*, and *water* are used. The sulphuric acid forms with the soda a *super-sulphate of soda* in the retort, whilst the muriatic acid passes over into the receiver in a gaseous form, and is condensed by the water placed therein.

Q. Why is common salt called muriate of soda?

A. To shew its *base* and *acid*, it being a compound of muriatic acid and soda, thus distinguishing it from other salts.

Q. In what preparation is muriatic acid used?

A. The tinctura ferri muriatis.

Q. What are the virtues of muriatic acid?

A. Antiseptic and tonic: dose from five drops to twenty.

Q. What are the virtues of sulphuric acid?

A. Tonic, astringent, and antiseptic.

Q. Of the diluted sulphuric acid what dose would you administer?

A. From five drops to half a fluid drachm.

Q. What are the constituents of sulphuric acid?

A. Sulphur and oxygen.

Q. As a diaphoretic, how much ipecacuanha would you exhibit?

A. From one grain to four.

Q. What plant affords us elaterium?

A. Momordica elaterium.

Q. What are the virtues of the extractum elaterii?

A. Violently cathartic, and in over dose emetic:

dose from one-eighth of a grain to two grains, given with much care.

Q. Name the preparations of mercury.

A. Hydrargyri nitrico oxydum;—hydr. oxydum cinereum;—hydr: oxyd: rubrum;—hydr: oxymurias; hydr: submur;—hydr: sulphuretum nigrum;—hydr: sulph: rub:;—hydrargyrum cum creta;—hydr: præcipitatum album;—hydr: purificat.;—liquor hydrargyri oxymuriatis;—pilulæ hydrargyri;—pil: hydr: submuriatis compositæ;—linimentum hydr:;—unguentum hydr: fortius;—ung: hydr: nitrias;—ung: hydr: mitius;—ung: hydr: nitrico oxydi;—ung: hydr: præcipitati albi.

Q. In drying alum what change is effected?

A. It is deprived of its water of crystallization.

Q. Name the preparations of alum.

A. Alumen exsiccatum, and liquor aluminis and compositus.

Q. What are the constituents of alum?

A. Sulphuric acid (*in excess*), alumina, and a little potass.

Q. What are the component principles of soda?

A. A metal called sodium with oxygen.

Q. What is nitric acid?

A. A compound of nitrogen and oxygen.

Q. Describe the process for making nitric acid.

A. Take of dried *nitrate of potass* and *sulphuric acid* of each (by weight) two pounds. Mix in a glass retort, then let the nitric acid distil from a sand-bath, until a red vapour is evolved; then having thrown upon it an ounce of dried nitrate of potass, again let the acid distil in the same manner. The specific weight of nitric acid is to the specific weight of distilled water as 1,500 to 1,000. If into a fluid ounce of this dissolved with water a piece of limestone be put, an ounce ought to be dissolved.

Q. What chemical change takes place in preparing nitric acid?

A. *Nitrate of potass* and *sulpuric acid* are used. The sulphuric acid decomposes the nitrate, and forms with the potass a *super-sulphate of potass* (which remains in the retort) whilst the nitric acid passes over into the receiver.

Q. What are the virtues of the diluted nitric acid?

A. Tonic, antiseptic, and anti-syphilitic: dose from five drops to thirty.

Q. What are the elements of æther?

A. Hydrogen, carbon, and oxygen.

Q. Enumerate the preparations of æther.

A. The spiritus ætheris aromaticus;—sp: æth: nitrici;—sp: æth: sulphurici;—sp: æth: sulph: compositus;—æther: sulphuricus;—æther: rectificatus;—oleum æthereum.

Q. How is nitric acid to be diluted?

A. Take of *nitric acid* a fluid ounce, distilled water nine fluid ounces: mix.

Q. What should be the appearance of nitric acid?

A. Nearly colourless like water; for if of an orange tinge the presence of nitrous acid-gas is indicated.

Q. What peculiar effect has heat upon alumine?

A. It contracts it, and renders it extremely hard.

Q. To what is the transparency and form of crystals owing?

A. The water of crystallization they contain.

Q. What plant is camphor obtained from?

A. The laurus camphora.

Q. In drying the sub-carbonate of soda what takes place?

A. Its water of crystallization is evaporated.

Q. What are the components of potass?

A. A metal called potassium, and oxygen.

Q. What are the constituents of soda?

A. A metallic base called sodium, and oxygen.

Q. How is the potassæ sulphas to be prepared?

A. Take of the salt which remains after the distillation of nitric acid two pounds (*super sulphate of potass*), *boiling water* two gallons. Mix, that the salt may be dissolved, then add of sub-carbonate of potass what may be sufficient to saturate the acid; next boil until a pellicle may swim on the surface, and having strained it set it aside, that crystals may form. The water being poured off, dry upon blotting paper.

Q. In preparing the potassæ sulphas what decomposition takes place?

A. The super-abundant sulphuric acid is saturated by the potass, a *sulphate of potass* is thus formed, whilst the carbonic acid of the sub-carbonate escapes.

Q. What are the virtues of the sulphate of potass?

A. Cathartic: dose from one scruple to six or eight drachms.

Q. Name the preparations of potass.

A. The liquor potassæ;—liq: pot: sub-carbonatis; —pot: cum calce;—pot: fusa;—pot: acetas;—pot: carbonas;—pot: sub-carbonas;—pot: sulphas;—pot: super-sulphas;—pot: tartras.

Q. How is the liquor potassæ to be prepared?

A. Take of *sub-carbonate of potass* a pound, *fresh lime* half a pound, *boiling distilled water* a gallon; dissolve the potass in two pints of the water, add to the lime the remainder of the water, mix the heated liquors together, then set aside in a covered vessel, and when cold, strain through a cotton cloth; if any diluted acid being dropped in excite bubbles, it will be necessary to add more lime and to strain again.

Q. In making the liquor potassæ what takes place?

A. *Lime*, *sub-carbonate of potass*, and *water* are used: The lime forms with the carbonic acid an insoluble carbonate of lime, leaving the potass dissolved in the water.

Q. What is the chemical composition of the cuprum ammoniatum?

A. It is a sub-sulphate of ammonia and copper.

Q. Name the preparations of copper.

A. The cuprum ammoniatum, liquor cupri ammoniati, and cupri sulphas.

Q. What are the virtues of the cupri sulphas?

A. Emetic, astringent, tonic: dose from a quarter of a grain to four grains.

Q. What do you understand by a triple, or ternary salt?

A. It consists of two bases and an acid, as the *tartarized antimony*, it being a compound of tartaric acid, potass, and antimony.

Q. What are the properties of alkalies?

A. They are of a urinous caustic taste, soluble in water, will decompose and unite with acids, forming new compounds; they render oils misceble with water, are possessed of considerable caustic properties, will change the blue juices of vegetables to a green and the yellow to a brown.

Q. What are the virtues of the liquor potassæ?

A. Antacid and lithontriptic: dose from five drops to half a fluid drachm.

Q. How is the liquor ammoniæ actatis prepared?

A. Take of *sub-carbonate of ammonia* two ounces; *acetic acid* four pints. Add the acid to the sub-carbonate of ammonia until no more bubbles be excited; and mix.

Q. What decomposition takes place in making the liquor ammoniæ acetatis?

A. *Sub-carbonate of ammonia* and *acetic acid* are used. While the ammonia forms with the acetic acid a saturated solution of *acetate of ammonia*, the carbonic acid escapes in a gaseous form.

Q. What are the virtues of the liquor ammoniæ acetatis?

A. Diaphoretic: dose from a fluid drachm to an ounce.

Q. What salt remains in the retort after the distillation of nitric acid?

A. *Super*-sulphate of potass, that is, potass with an excess of sulphuric acid.

Q. Name the preparations of antimony.

A. The antimonii oxydum;—antimonii sulphuretum præcipitatum;—antimonium tartarizatum;—liquor antimonii tartarizati;—pulvis antimonialis;—pilulæ drargyri submuriatis.

Q. What preparation of antimony enters the pilulæ hydrargyri submuriatis?

A. The antimonii sulphuretum præcipitatum.

Q. Describe the method laid down for preparing the pulvis antimonialis.

A. Take of *bruised sulphuret of antimony* a pound, *hartshorn shavings* two pounds. Mix and throw them into a broad iron pot, heated to whiteness, attentively stirring them until they shall be of an ash colour; being taken out, rub them into a powder, and put this into a coated crucible, on which rest another crucible inverted, and having a small hole in its bottom; then apply the fire, and increase it gradually so that it may be kept at a white heat for two hours; rub the residue into a very fine powder.

Q. What changes are effected in making the pulvis antimonialis?

A. *Sulphuret of antimony* and *hartshorn shavings* are employed. The heat drives off the sulphur, leaving the antimony oxidized; the gelatin of the hartshorn shavings is destroyed, and the phosphate of lime which remains becomes mixed with the oxide of antimony.

Q. What are the virtues of the antimonial powder?

A. Diaphoretic and alterative: dose from three grains to ten; in larger quantities it will *excite* the stomach and operate upon the bowels.

Q. Name the preparations of the aloës spicatæ.

A. The decoctum aloës compositum;—extractum aloës;—extractum colocynthidis compositum;—tinctura aloës;—tinct: aloës comp:;—tinct: benzoini comp: vinum aloës;—pulvis aloës compositus;—pilulæ aloës cum myrrha;—pil: aloës compositæ;—pil: cambogiæ comp.

Q. How many kinds of aloes are there?

A. Two, the aloës spicatæ extractum, and the aloës vulgaris extractum.

Q. What are the constituent principles of the ferrum tartarizatum?

A. Tartaric acid, oxide of iron, and potass.

Q. How is the ferrum tartarizatum to be prepared?

A. Take of *iron* a pound, *bruized super-tartrate of potass* two pounds, water a pint. Rub them together and expose them to the *air* in a wide glass vessel for eight days; next dry them in a sand-bath and rub them into a very fine powder; a pint of water being added to this powder, again set it aside for eight days, then dry and rub it to a powder.

Q. What decompositions take place in preparing the tartarized iron?

A. *Iron*, *super-tartrate of potass*, and *water* are used. The iron is oxidated by attracting oxygen from the water and atmospheric air; the superabundant tartaric acid unites with this oxide, and a triple or ternary compound is obtained, which is a tartrate of iron and tartrate of potass.

Q. What are the constituents of sulphuric acid?

A. Sulphur and oxygen.

Q. How is sulphuric acid to be diluted?

A. Take of *sulphuric acid* a fluid ounce and half, *distilled water* fourteen fluid ounces and a half. Add the acid gradually to the water, then mix.

Q. What are the virtues of diluted sulphuric acid?

A. Tonic, astringent, and antiseptic: dose from ten drops to thirty.

Q. How is potassæ acetas to be prepared?

A. Take of *sub-carbonate of potass* a pound and half, *acetic acid* a gallon. Mix them together in a large glass vessel, and one half being evaporated over the fire, drop into it as much acetic acid as may be sufficient for perfect saturation; let the liquor be again evaporated to one half, and let it be filtered then in a water-bath: continue the evaporation so that it may crystallize when removed from the fire.

Q. What is the theory of the process for making acetate of potass?

A. *Sub-carbonate of potass* and *acetic acid* are used. While the potass forms with the acetic acid an *acetate of potass* in solution, the carbonic acid escapes.

Q. What are the virtues of the acetate of potass?

A. Diuretic and cathartic: dose from ten grains to three drachms.

Q. Name the preparations of lead.

A. Liquor plumbi subacetatis;—liq: plumb: subacetatis dilutus;—plumbi superacetas;—and emplastrum plumbi.

Q. What is phosphoric acid?

A. A compound consisting of a peculiar substance called phosphorus, and oxygen.

Q. What are the constituents of sugar?

A. Oxygen, carbon, and hydrogen.

Q. What is honey?

A: Sugar dissolved in mucillage; it is chiefly formed in the pistils of the female organs of flowers, whence it is gathered by bees.

Q. Name the preparations of honey.

A. Mel despumatum;—mel boracis;—mel rosæ,—oxymel simplex,—and oxymel scillæ.

Q. What is wax?

A. A vegetable substance collected by bees from the anthers of flowers, insoluble in water and alkohol, but soluble in volatile and fixed oils, and is highly inflammable.

Q. What is hydrogen?

A. The base of the gas which has been called inflammable air, and is in the aëriform state the lightest of all substances.

Q. What is hydrogen gas, or inflammable air?

A. Hydrogen united to caloric and light.

Q. What are the peculiar properties of hydrogen?

A. It is twelve times lighter than air, has a peculiar disagreeable smell, supports flame only when in contact with oxygen.

Q. What are the constituent elements of oil?

A. Carbon, hydrogen, and a small portion of oxygen.

Q. How ars oils distinguished?

A. Into fixed and volatile.

Q. How are oils obtained?

A. Fixed oils are usually obtained by pressure from seeds and kernels of plants; and volatile or essential oils by distillation from aromatic plants.

Q. What is there peculiar to animal oil?

A. It is generally solid at the temperature of the atmosphere; it contains more oxygen and sebacic acid than the vegetable oils.

Q. When a metal has chemically combined with oxygen what is it called?

A. An oxide.

Q. When a combustible substance is combined with an earth or metal, how is it distinguished?

A. By the combustible terminating in *uret*, as sulph*uret* of lime, &c.; the metal or earth retaining its proper name.

Q. How is alkohol prepared?

A. By distillation from vegetable infusions that have undergone spirituous fermentation.

Q. Name the principle antiseptics.

A. All the acids, quassia, æther, wine, opium, camphor, and the barks.

Q. How are acids distinguished with reference to the oxygen they contain?

A. When the base of an acid is saturated with the acidifying principle, it terminates in *ic*, as muriat*ic* acid; if imperfectly saturated, in *ous*, as sulphur*ous* acid; when there is an excess of oxygen, it is said to be oxygenated, and hyper-oxygenated.

Q. Name the carbonates used.

A. The carbonates of lime, magnesia, potass, zinc, iron, soda, and ammonia.

Q. How is sulphate of iron to be prepared?

A. Take of *iron* and *sulphuric* acid, of each, by weight, eight ounces, *water* four pints. Mix the sulphuric acid with the water in a glass vessel; to this add the iron; then, when effervescence has ceased, filter the liquor through paper; evaporate it over the fire, so that as it cools crystals may be formed: the water being poured off, dry these upon blotting paper.

Q. What decompositions are effected in preparing the sulphate of iron?

A. *Iron*, *sulphuric acid*, and *water*, are used. The ron decomposes part of the water, and is oxidated at the expense of some of its oxygen; and the sulphuric acid dissolves the oxide of iron thus formed.

Q. What are the virtues of the ferri sulphas?

A. Tonic and emmenagogue: dose from one grain to five.

Q. What is kino?

A. The extract of an African tree not yet named; it is an nstringent: dose from ten grains to half a drachm.

Q. What is the proportion of mercury in the pilulæ hydrargyri?

A. One grain in three.

Q. What is the strength of the mild mercurial ointment?

A. Six drachms of the ointment contain one drachm of mercury.

Q. What is the proportion of mercury in the unguentum hydrargyri fortius?

A. In two drachms there is one drachm of mercury.

Q. How is the vinum ferri to be prepared?

A. Take of *iron filings* two ounces, *wine* two pints. Mix and set it by for a month, shaking it occasionally, then filter it through paper.

Q. What takes place in making the vinum ferri?

A. *Iron filings* and *wine* are used; the tartaric acid of the wine oxidates and dissolves the iron.

Q. What are the virtues of the vinum ferri?

A. Tonic and emmenagogue: dose from a fluid drachm to half an ounce.

Q. How is the nitric oxide of mercury to be prepared?

A. Take of *purified quicksilver*, by weight, three pounds, *nitric acid*, by weight, a pound and half, *distilled water* two pints. Mix in a glass vessel, and boil until the mercury is dissolved, and the water being evaporated a white mass remains; rub this into a powder, and cast it into another vessel of as little depth as possible, then apply a gentle heat, and increase it gradually until a red vapour ceases to be emitted.

Q. What is effected in making nitric oxide of mercury, according to this process?

A. *Purified mercury*, *nitric acid*, and *water*, are used. The mercury is first oxidized by effecting a decomposition of part of the nitric acid, some nitrous gas escapes, and the oxide of mercury is dissolved as it forms by the remaining acid, forming a nitrate of mercury; as the heat is increased more nitrous gas is evolved, and the preparation reduced to a *sub-nitrate* of mercury.

Q. What preparation does the nitric oxide of mercury afford in the pharmacopœia?

A. The unguentum hydrargyr nitrico oxydum.

Q. What are the virtues of the submuriate of mercury?

A. Cathartic, alterative, and antisyphilitic.

Q. As a cathartic, how much may be administered?

A. From two grains to ten.

Q. As an alterative what would be your dose?

A. From a quarter of a grain to a grain.

Q. In what preparations is the subcarbonate of iron employed?

A. In preparing the ferrum ammoniatum and the tinctura ferri muriatis.

Q. What preparation of iron is used in the pil: ferri cum myrrha?

A. The ferri sulphas.

Q. Name the preparations of chalk.

A. The mixtura cretæ; — pulvis cretæ compositus cum opio; —hydrargyrum cum creta; and the pulv: cretæ compositus, &c.

Q. In what preparations is lime used?

A. The liquor calcis, and the potassa cum calce.

Q. How is the liquor of lime to be prepared?

A. Take of *lime* sixteen ounces, *boiling distilled water* twelve pints; pour the water upon the lime, and shake them together; cover the vessel immediately, and set it aside for three hours; then keep the liquor with the undissolved lime in stopped glass vessels, and when you use it employ the clear liquor.

Q. What are the virtues of the liquor calcis?

A. Tonic, antacid, astringent and anthelmintic dose, from a fluid ounce to half a pint.

Q Name the preparations of magnesia.

A. Magnesia; — magnesiæ carbonas; — magnesiæ sulphas.

Q. What is the composition of magnesia?

A. A metal called magnium and oxygen.

Q. What are the virtues of magnesia?

A. Antacid, and mildly cathartic; dose from ten grains to two or three drachms.

Q. What are the properties of squills?

A. Diuretic, stimulant, and expectorant; in over dose emetic.

Q. What plant affords us the radix scillæ?

A. The scilla maritima.

Q. How is the submuriate of mercury prepared?

A. Take of *oxymuriate of mercury* a pound, *purified mercury* by weight nine ounces. Rub them together until no more globules are to be seen, then sublime; next take out the sublimate, and powder it, and sublime it a second and a third time; lastly, let it be made a subtle powder, in the same manner we have ordered chalk to be prepared.

Q. Give the theory of the process for making the hydrargyri submurias.

A. Oxymuriate of mercury and purified mercury are employed. The purified mercury is oxidized at the expense of part of the oxygen of the oxymuriate; sublimation assists the combination of the two oxides, and the submuriate is obtained. Davy considers the metallic mercury combines with a portion of the chlorine, reducing the bichloride to a chloride of mercury.

Q. Name the preparations of soda.

A. Sodæ murias;—sodæ sub-boras;—sodæ sulphas;—soda impura;—soda tartarizata;—sodæ carbonas;—sodæ sub-carbonas exsicata.

Q. Name the native muriatic salts.

A. Muriate of lime;—muriate of soda;—muriate of ammonia;—and muriate of magnesia.

Q. Give an example of a double decomposition.

A. If to a solution of sub-carbonate of potass a solution of sulphate of magnesia be added, and the liquor boiled, there will be an exchange of acids, and two new compounds formed, thus: the magnesia will give its sulphuric acid to the potass, forming a solution, a *sulphate of potass;* and the potass its carbonic acid to the magnesia, forming an insoluble *carbonate of magnesia.*

Q. What is the proportion of opium in the pulvis ipecacuanhæ compositus?

A. One grain of opium in ten grains of the powder.

Q. What are the virtues of digitalis?

A. Narcotic, diuretic, and sedative, diminishing the action and strength of the circulation: dose of the powder from one grain to three.

Q. Name the preparations of digitalis.

A. The tinctura digitalis and *infusum digitalis.*

Q. Which is the most active, the fresh or dried squill root?

A. The dried, owing to the water contained in the fresh.

Q. How many species of cinchona are directed to be kept?

A. Three: the *cortex cinchonæ lancifoliæ*, called pale or quilled bark; *cortex cinchonæ oblongifoliæ*, or red bark; and the *cortex cinchonæ cordifoliæ*, or yellow bark.

Q. What are the constituents of arrow-root?

A. Carbon, oxygen, hydrogen, and a small portion of nitrogen.

Q. In what does the astringent principle of oak bark consist?

A. A substance called tannin, which exists in many other vegetables.

Q. Name the volatile oils of the pharmacopœia.

A. Oleum anisi;—ol : anthemedis ;—ol : carui;—ol : juniperi;—ol : lavendulæ,—ol : menthæ piperitæ; —ol : menthæ viridis ;—ol : origani ;—ol : pimentæ ; —ol : pulegii ;—ol : rosmarini.

Q. Whence do we receive camphor ?

A. Chiefly from Japan.

Q. What plant affords us camphor ?

A. The laurus camphora.

Q. Name the tartaric salts of the pharmacopœia.

A. The bitartrate of potass (called super-tartrate of potass) ;—tartrate of potass, tartrate of soda and potass (called tartarized soda) ; tartrate of antimony and potass (called tartarized antimony) ; tartrate of iron and potass (called tartarized iron).

Q. Name the infusions of the pharmacopœia.

A. Infusum anthemidis ;—infus : armoraciæ compositum ;—infus : aurantii compositum ;—infus : calumbæ ;—infus : caryophyllorum ;—infus : cascarillæ ; —inf : catechu compositum ;—infus : cinchonæ ;—infus : cuspariæ ;—inf : digitalis ;—inf : gentianæ compositum ;—inf : lini ;—inf : quassiæ ;—inf : rhœi ;—inf : rosæ ;—inf : sennæ ;—inf : simaroubæ ;—inf : tabaci.

Q. Name the preparations of the cinchona barks.

A. Decoctum cinchonæ ;—infusum cinchonæ ;—extractum cinchonæ ;—ext : cinch : resinosum ;—

tinctura cinchonæ; – tinct: cinch: comp:—tinct: cinch: ammoniata.

Q. In making the different preparations of bark, which species of cinchona is to be used?

A. The cortex cinchonæ lancifoliæ, the quilled or pale bark.

Q What are the virtues of cinchona bark?

A. Tonic, febrifuge, astringent, and stomachic: dose from five grains to three drachms.

Q What is the botanical name of the tree which affords us cinnamon?

A. Laurus cinnamomum.

Q. In making the tinctura benzöini composita what do you employ?

A. Benzoin, balsam of storax, balsam of tolu, extract of spiked aloes, and rectified spirit.

Q. What are the virtues of chalk?

A. Antacid, absorbent: dose from ten grains to two drachms.

Q. How is the sulphate of soda prepared?

A. Take of the salt which remains after the distillation of muriatic acid two pounds (*super-sulphate of soda*); *boiling water* two pints and a half. Dissolve the salt in the water, then add by degrees of sub-carbonate of soda, as much as may be necessary to saturate the acid; boil down until a pelicle may appear, and having strained it, set it aside that crystals may form; having poured off the water, dry these upon blotting paper.

Q Give the decomposition accomplished in preparing sulphate of soda.

A. *Super-sulphate of soda* and *sub-carbonate* of *potass* are used: as the *soda* saturates the superabundant acid its *carbonic* acid escapes; a sulphate of soda is the result.

Q. What are the virtues of ammoniacum?

A. Antispasmodic and expectorant: dose from five grains to twenty.

Q. Name the preparations of ammoniacum.

A. Pilulæ scillæ compositæ;—emplastrum ammoniaci;—mistura ammoniaci;—emp: ammoniaci cum hydrargyri.

Q What is ammoniacum the produce of?

A. The heracleum gummiferum; it is received from the East-Indies.

Q In cases where poison has been taken, what emetic would you prefer?

A. The sulphate of zinc.

Q As an emetic, how much sulphate of zinc would you exhibit?

A From ten grains to twenty.

Q. In making the mistura moschi what articles are employed?

A. Musk, gum acaciæ, purified sugar, and rose-water.

Q. How is the alumen exiccatum prepared?

A. Melt alum in a proper vessel over the fire, then let the heat be increased until the ebullition ceases.

Q. In drying alumen what is accomplished?

A. Its water of crystallization is driven off.

Q. What is the chief virtue of alum?

A. Astringent: dose from two grains to twenty.

Q. What is sub-carbonate of soda?

A. Soda with less carbonic acid than is necessary to effect saturation and water of crystallization

Q. How is the sodæ sub-carbonas prepared?

A. Take *impure soda* in fine powder, a pound; *boiling distilled water* four pints. Boil the soda in the water for half an hour and strain; let this be evaporated to two pints, and set it by that it may form crystals: throw away the superfluous liquor.

Q. Does any decomposition take place?

A No, but the impure soda contains earthy and alkaline salts, which by the process it is deprived of.

Q. In drying the sub-carbonate of soda what takes place?

A. The water of crystallization is driven off.

Q. How is the sub-carbonate of soda to be dried?

A. Take of *sub-carbonate of soda* a pound. Expose the sub-carbonate of soda to a boiling heat in a clean iron vessel until it is quite dried, attentively stirring it with an iron rod; finally, rub it into a powder.

Q. What are the virtues of the dried sub-carbonate of soda?

A. Antacid, diuretic, and lithontriptic: dose from five grains to half a drachm.

Q. What are the components of tartarized soda?

A. Tartaric acid, potass, soda, and water of crystallization.

Q. In the preparation of mercury with chalk, how much mercury is there?

A. Three grains contain about one grain of mercury.

Q. What enters the confectio aromatica?

A. Cinnamon-bark, nutmegs, cloves, cardamon-seeds, saffron, prepared oyster-shells, purified sugar, and water.

Q. What are the virtues of the mezerei cortex?

A. Stimulant, diaphoretic: dose from one grain to ten.

Q. What is the systematic name of the tree from which the mezerei cortex is obtained?

A Daphne mezereum.

Q. Name the plant of the pyrethri radix.

A. Anthemis pyrethrum.

Q. What are the virtues of pyrethri radix?

A. Sialogue and stimulant: dose from two grains to ten.

Q. What fish affords us cetaceum?

A. A species of whale called the physeter macrocephalus.

Q. What is understood by fusion?

A. The reduction of bodies by the assistance of heat into a state of fluidity.

Q. What is assafœtida?

A. The gum resin of the *ferula assafœtida* growing in Persia, obtained by making incisions in the root of the plant, from which it exudes.

Q. What are the virtues of assafœtida?

A. Expectorant, antispasmodic: dose from five grains to a scruple.

Q. Name the preparations of assafœtida.

A. The tinctura assafœtidæ;—spiritus ammoniæ fœtidus;—mistura assafœtidæ;—pilulæ galbani compositæ.

Q. What is benzöinum?

A. The concrete resinous juice of the *styrax benzoin* growing in the East and West-Indies.

Q. Of what is metallic antimony composed?

A. A metal with sulphur.

Q. Name the antacids of the pharmacopœia.

A. Lime, soda, potass, magnesia, oyster-shells, and chalk.

Q. How is the potassa fusa prepared?

A. Take of liquor of potass a gallon; evaporate the water in a clean iron vessel over the fire, until the ebullition having ceased, the potass may be liquified;

pour off this upon an iron plate into convenient forms.

Q. In fusing potass what is effected?

A. The water being evaporated, the potass is left in a solid form.

Q. What is the use of fused potass?

A. Externally as an escharotic.

Q. How is the liquor arsenicalis to be prepared?

A. Take of *sublimed oxide of arsenic* reduced to a fine powder, *sub-carbonate of potass* from tartar, of each sixty-four grains, *distilled water* a pint. Boil them together in a glass vessel until all the arsenic is dissolved; add to the liquor when cold of *compound spirits of lavender* four drachms; lastly, add upon it as much distilled water ns may be sufficient exactly to fill up the pint measure.

Q. What takes place in preparing the arsenical liquor?

A. An union takes place between the arsenious acid and the potass, forming a solution of *arseniate of potass.*

Q. Name the mixtures of the pharmacopœia.

A. Mistura ammoniaci;—mist: amygdalarum;—mist: assafœtidæ;—mist: camphoræ;—mist: cornu usti;—mist: cretæ;—mist: ferri composita;—mist: guaici;—mist: moschi.

Q. Name the spirits of the pharmacopœia..

A Alcohol;—spiritus ammoniæ; — sp: ammon:

aromaticus ;—sp : ammoniæ fœtidus ;—sp : ammoniæ succinatus ;—sp : anisi ;—sp : armoraciæ compositus ; sp : camphoræ ;—sp : carui ;—sp : cinnamomi ;—sp : juniperi compositus ; – sp : lavendulæ ;—sp : lavend : comp :—sp : menthæ piperitæ :—sp : menth : viridis ; —sp : myristicæ ; — sp : pimentæ ;—sp : pulegii ; — sp : rosmarini ; — sp : ætheris aromaticus ;—sp : æth : nitrici ;—sp : æth : sulphurici, and sp : æth : sulph : compositus.

Q. Name the wines of the pharmacopœia.

A. The vinum alöes ;—vin : ipecacuanhæ ;—vin : opii, and the vin : veratri.

Q. What is scammony ?

A. A concrete juice extracted from the roots of the convolvulus scammonia, which grows in Asiatic Turkey : we receive it from Aleppo, consisting of gummy extract and resin.

Q. What are the virtues of scammony ?

A. Cathartic and hydragogue : dose from five grains to ten.

Q. Name the preparations of scammony.

A. Confectio scammoniæ ;—pulvis scammon : compositus.

Q. What tree affords the cascarillæ cortex ?

A. The croton cascarilla, or croton eleutheria, received from the Bahama Islands.

Q. What are the properties of the cascarilla bark ?

A. Tonic and stomachic: dose from six grains to two scruples.

Q. What is meant by the deliquescence of a salt?

A. Some salts having a great affinity for water on being exposed to the atmosphere, absorb it and become moist; they are in this case said to deliquesce.

Q. What is castor?

A. The inguinal glands of a four-footed amphibious animal called the beaver; it is received from Russia and Canada.

Q. What are the virtues of castor?

A. Antispasmodic and emmenagogue: dose from gr. x. to a drachm.

Q. What is the cassiæ pulpa the produce of?

A. It is the fruit of the cassia fistula, a tree resembling the walnut, received from the East and West Indies.

Q. What is the principal virtue and dose of the cassiæ pulpa?

A. Laxative: dose from two drachms to an ounce.

Q. What tree is the abietis resini obtained from?

A. The pinus abies.

Q. What are sialogues?

A. Medicines which increase the secretion of saliva.

Q. Give the composition of vegetable acids.

A. Hydrogen, carbon, and oxygen.

Q. When zinc is exposed to a strong heat what takes place?

A. It attracts oxygen from the air: a white oxide is the result.

Q. What plant affords us gentian root?

A. The gentiana lutea, received from Germany.

Q. What are the virtues of gentian root?

A Tonic andstomachic: dose from ten grains to half a drachm.

Q. Name the preparations of gentian.

A. The extractum gentianæ;—infusum gentianæ compositum, and the tinctura gentianæ composita.

Q. To what plant does the veratri radix belong?

A. The veratrum album; it grows spontaneously in the mountainous parts of Germany and Switzerland.

Q. What are the preparations of white hellebore root?

A. The decoctum veratri, and unguentum veratri.

Q. What is manna?

A. The concrete juice of the fraxinus ornus, a tree of the ash kind, which grows in Italy and Sicily.

Q. What preparation of the pharmacopœia does manna enter?

A. The confectio cassiæ

Q What is the medicinal virtue of manna?

A. Laxative: dose from two drachms to two ounces.

Q. What is musk?

A. A peculiar substance not unlike dried clotted blood, found in a small bag near the umbilical region of the moschus moschiferus, or musk deer, received from Asia; the best from Tonquin.

Q What are the virtues of moschus?

A. Antispasmodic, diaphoretic, and stimulant: dose from one grain to one drachm.

Q. What preparation of musk enters the pharmacopœia?

A. The mistura moschi.

Q. What are anthelmintics?

A. Medicines which possess the power of destroying worms.

Q. To what plant does the bistortæ radix belong?

A. The polyganum bistorta, growing in moist soils in many parts of England and Austria.

Q. What are the virtues of the birtortæ radix?

A. Astringent and tonic: dose from five grains to one drachm.

Q. How is the tartrate of potass to be prepared?

A. Take of *sub-carbonate of potass* sixteen ounces, *super-tartrate of potass* three pounds, *boiling water* a gallon. Dissolve the sub-carbonate of potass in the water, then add the super-tartrate of potass, rubbed into a fine powder, until no more bubbles may be excited, strain the liquor through paper, then boil until a pelicle may float, and set aside that crystals may form; the water being poured off, dry these upon blotting paper.

Q. What decomposition takes place in preparing the potassæ tartras?

A. The potass of the sub-carbonate neutralizes the superabundant acid of the super-tartrate, whilst its carbonic acid escapes in a gaseous form.

Q. What are the virtues of the tartrate of potass?

A. Cathartic: dose from half a drachm to an ounce.

Q What are the constituents of the tartrate of potass?

A. Potass, tartaric, and water.

Q. To what plant does the jalap root belong?

A. The convolvolus jalapa, received from Mexico.

Q. Name the preparations of jalap root.

A. The tinctura jalapæ, and extractum jalapæ.

Q. What are the virtues of the tinctura-lyttæ?

A. Diuretic and stimulant: dose from ten drops to thirty.

Q. To what plant does the radix rhei belong?

A. The rheum palmatum, growing spontaneously in China. Two sorts of rhubarb are imported into this country, one from Turkey, and the other from the East-Indies: the former is the most esteemed.

Q. What are the properties of rhubarb?

A. Cathartic, stomachic, and astringent: dose from five grains to half a drachm.

Q. Name the preparations of rhubarb.

A. The tinctura rhei;—tinct: rhei composita, and infusum rhei.

Q. Name the cathartic salts found in mineral waters.

A. The muriates of magnesia, of lime, and of soda, and the sulphates of soda and of magnesia.

Q. What is ærugo, or verdigris?

A. An impure sub-acetate of copper.

Q. What are the properties of ærugo?

A. Emetic and alterntive; seldom or ever used: dose from one-eighth of a grain to half a grain.

Q. What are the virtues of the sub-carbonate of iron?

A. Tonic and emmenagogue: dose from three grains to ten.

Q. How is the ferri sub-carbonas to be prepared?

A. Take of *sulphate of iron* eight ounces, *sub-carbonate of soda* six ounces, *boiling water* a gallon; dissolve the sulphate of iron and the sub-carbonate of soda separately in four pints of the water; then mix the liquors together and set it by, that the powder may subside; then having poured off the supernatant liquor, wash the sub-carbonate of iron with hot water, and dry it with a gentle heat, folded in blotting paper.

Q. What decomposition is effected in the process for making sub-carbonate of iron?

A. An exchange of acids takes place: the soda taking the sulphuric acid of the iron, forming in solution a *sulphate of iron;* while the iron takes the carbonic acid of the soda, forming an insoluble subcarbonate of iron.

Q. What are the virtues of the liquor ammoniæ?

A. It is administered principally as an antacid: dose from five drops to fifteen or twenty.

Q. How is the liquor ammoniæ to be prepared?

A. Take of *muriate of ammonia* eight ounces, *fresh lime* six ounces, *water* four pints; pour a pint of the water upon the lime; then cover the vessel and set it by for an hour; then add the muriate of ammonia and the remaining water, first heated, and again cover the vessel; filter the liquor when it shall be cold; then let twelve fluid ounces of liquor of ammonia be distilled. The specific gravity of liquor of ammonia is to the specific gravity of distilled water as 3,960 to 1,000.

Q. In preparing the liquor of ammonia what chemical changes take place?

A. *Muriate of ammonia, fresh lime,* and *water* are used: The muriatic acid of the muriate unites with the lime, forming an *insoluble muriate of lime,* while the *ammonia* enters into solution with the water.

Q. How is the ammoniated iron to be prepared?

A. Take of *sub-carbonate of iron* and *muriate of ammonia,* of each a pound; mix them diligently, then subject them to a fierce heat, and immediately sublime; lastly, rub it into powder.

Q. What are the virtues of the ferrum ammoniatum?

A. Tonic and emmenagogue: dose from five grains to fifteen.

Q. In preparing ammoniated iron what decompositions take place?

A. With the assistance of heat the carbonic is set free, and the iron unites with a portion of the muriatic acid of the muriate, forming a *sub-muriate of iron and ammonia*.

Q. How is the oxide of antimony to be prepared?

A. Take of *tartarized antimony* an ounce, *sub-carbonate of ammonia* two drachms, *distilled water* as much as may be sufficient; dissolve the salts separately in the water, then mix the liquors and boil until the oxide of antimony is precipitated; wash this by the affusion of water, and dry it.

Q. What are the virtues of the oxide of antimony?

A. Alterative and diaphoretic: dose from two grains to fifteen.

Q. What is the theory of the process for making oxide of antimony?

A. The ammonia parts with its carbonic acid, and forms with the tartaric acid and potass of the antimony a ternary salt in solution, and the *oxide of antimony* is precipitated.

Q. How is magnesia prepared?

A. Take of *carbonate of magnesia* four ounces; burn it with a fierce fire for two hours, or until the dropping in of acetic acid shall excite no bubbles.

Q. What change is effected in making magnesia?

A. *Carbonate of magnesia* being subjected to a fierce heat, the carbonic acid is driven off, and pure magnesia is the result.

Q. What are the virtues of magnesia?

A. Antacid and cathartic: dose from one scruple to two drachms.

Q. How is the hydrargyri oxydum rubrum to be prepared?

A. Take of *purified mercury*, by weight, a pound; put the mercury into a glass vessel with a narrow mouth and broad base; apply to this open vessel a heat of six hundred degrees, until the mercury shall form into red scales, then rub it into a subtle powder.

Q. What are the properties of the red oxide of mercury?

A. It is administered principally as an antisyphilitic: dose from one quarter of a grain to two grains.

Q. What chemical decompositions take place in making a red oxide of mercury?

A. The mercury is volatized by the heat employed, it is thus enabled to attract oxygen from the air, forming a red oxide.

Q. What plant affords us the cajaput oil?

A. The melaleuca cajuputi.

Q. What are the virtues of ammoniated copper?

A. Antispasmodic: dose from one-quarter of a grain to five grains.

Q. How is the cuprum ammoniatum to be prepared?

A. Take of *sulphate of copper* half an ounce, *subcarbonate of ammonia* six drachms; rub them together in a glass mortar until ebullition shall have ceased; then dry the ammoniated copper with a gentle heat, folded in blotting paper.

Q. What takes place in preparing ammoniated copper?

A. *Sulphate of copper* and *subcarbonate of ammonia* are used. The ammonia forms with the sulphate of copper a triple salt, consisting of sulphuric acid, ammonia, and copper, whilst the carbonic acid escapes.

Q. What are the properties of arsenic?

A. Arsenic is an extremely poisonous metallic substance, generally found in parts of Germany united with acids, oxygen, and sulphur; in its pure metallic state it is a brilliant metal of a bluish white colour, has no smell while cold, but when exposed to the power of heat it emits a very strong odour resembling onions or garlic.

Q. How is it that atmospheric air supports life?

A. By furnishing the blood with oxygen and caloric.

Q. What is chalk called by chemists?

A. Carbonate of lime: being a compound of carbonic acid and lime.

Q. How is the liquor of ammoniated copper to be prepared?

A. Take of *ammoniated copper* a drachm, *distilled water* a pint; dissolve the ammoniated copper in the water, and filter through paper.

Q. How is the tinctura ferri ammoniati to be prepared?

A. Take of *ammoniated iron* four ounces, *proof spirit* a pint; macerate and filter.

Q. What are the virtues of the ammoniated tincture of iron?

A. Tonic and emmenagogue: dose from ten drops to a fluid drachm.

Q. What articles are used in making the compound decoction of sarsaparilla?

A. Decoction of sarsaparilla, sassafras root, guaicum root, guaicum-wood shavings, liquorice-root bruised, and bark of the mezereon root.

Q. What are the virtues of the decoctum sarsaparillæ compositum?

A. Antisyphilitic, diuretic, and alterative: dose from a quarter to half a pint.

Q. In preparing the tinctura gentianæ composita what articles are used?

A. Gentian root, orange peel, cardamom seeds, and proof spirit.

Q. What do you understand by expectorants?

A. Medicines which will induce a free discharge of mucus from the lungs.

Q. In what kind of cases is assafœtida exhibited?

A. In *hysteria*, flatulent colics, hypochondriasis; sometimes in dyspepsia: its principal virtue being antispasmodic, it is employed in most spasmodic affections.

Q. How is the oxymuriate of mercury to be prepared?

A. Take of *purified mercury*, by weight, two pounds; *sulphuric acid*, by weight, thirty ounces; *dried muriate of soda* four pounds; boil the mercury with the sulphuric acid, in a glass vessel, until the sulphate of mercury shall be dried; triturate this when cool with the muriate of soda in an earthen mortar, then sublime it from a glass cucurbit, with a heat gradually raised.

Q. How is the liquor of oxymuriate of mercury to be prepared?

A. Take of *oxymuriate of mercury* eight grains, *distilled water* fifteen fluid ounces, *rectified spirit* a fluid ounce; dissolve the oxymuriate of mercury in the water, and add to it the spirit.

Q. In what proportion does the oxymuriate enter the liquor of oxymuriate of mercury?

A. One grain of oxymuriate in two fluid ounces of the liquor.

Q. What are the virtues of the liquor hydrargyri oxymuriatis?

A. Alterative and antisyphilitic.

Q. How is the compound mixture of iron to be prepared?

A. Take of *myrrh*, powdered, a drachm; *sub-carbonate of potass* twenty-five grains; *rose water* seven fluid ounces and a half; *sulphate of iron*, powdered, a scruple; *spirit of nutmeg* half a fluid ounce; *refined sugar*, a drachm: rub together the myrrh with the sub-carbonate of potass and sugar, and add to these during trituration, first the rose-water and spirit of nutmeg, then the sulphate of iron. Put the mixture immediately into a proper glass vessel, and stop it.

Q What are the virtues of the mistura ferri composita?

A. Tonic and emmenagogue: dose from half a fluid ounce to two ounces.

Q. What takes place in preparing the mistura ferri composita?

A. *Sulphate of iron, sub-carbonate of potass* and *water* are used: the sulphuric acid of the iron forms with part of the potass a *sulphate of potass* in solution, while the carbonic acid of the potass forms with the iron a *sub-carbonate of iron*, which is suspended in the mixture by the excess of potass forming with the myrrh a saponaceous compound.

Q. What are the virtues of the carbonate of potass?

A. Antacid, and diuretic: dose from ten grains to half a drachm.

Q. In making the compound tincture of rhubarb, what do you employ?

A. Rhubarb-root, liquorice-root, ginger-root, saffron, proof spirit, and water.

Q. What are the virtues of the tinctura rhei composita?

A. Stomachic and cathartic: dose from a fluid drachm to two ounces.

Q. What do you employ in preparing the tincture of senna?

A. Senna leaves, carraway-seeds, cardamom-seeds, raisins, and proof spirit.

Q. In preparing the aromatic spirit of æther, what articles are used?

A. Cinnamon-bark, cardamom-seeds, long pepper, ginger root, and spirit of sulphuric æther.

Q. What compound of iron exists in the mistura ferri composita?

A. A sub-carbonate of iron.

Q. What is the medical virtue of the extract of catechu?

A. Astringent: dose from five grains to fifteen.

Q. Where is the acacia catechu cultivated?

A. In the East-Indies.

Q. How is the nitrate of silver to be prepared?

A. Take of *silver* an ounce, *nitric acid* a fluid ounce, *distilled water* two fluid ounces: mix the nitric acid with the water, and dissolve the silver in these in a sand-bath, then gradually increase the heat so that the nitrate of silver may be dried; dissolve this in a crucible with a mild fire until the water being evaporated, ebullition shall cease, then pour it off immediately into convenient forms.

Q. What change takes place in preparing the nitrate of silver?

A. The silver decomposes part of the nitric acid and becomes oxidized; nitrous gas escapes, and the *oxide of silver* is dissolved as it forms by the remaining acid.

Q. What substances enter the compound tincture of aloes?

A. Extract of spiked aloes, saffron stigmata, and tincture of myrrh.

Q. What articles enter the composition of the tincture of cardamoms?

A. Cardamom-seeds, carraway-seeds, cochineal, cinnamon bark, raisins, and proof spirit.

Q. In what proportion does arsenic enter the liquor arsenicalis?

A. Two fluid drachms of the liquor contain one grain of oxide of arsenic.

Q. How is the hydrargyri oxydum cinereum to be prepared?

A. Take of *sub-muriate of mercury* an ounce, *lime water* a gallon; boil the sub-muriate of mercury in the liquor of lime, assidiously stirring it until the grey oxide of mercury subsides. Wash this with distilled water, then dry it.

Q Give the decomposition effected.

A. The lime unites with the muriatic acid of the sub-muriate, forming in solution *muriate of lime*, and the *grey oxide of mercury* is precipitated.

Q. What is the systematic name of the plant which affords galbanum?

A. Bubon galbanum.

Q. Whence do we receive the galbanum gummi resina?

A. From Turkey and the East-Indies; it is obtained by making incisions in the stalk of the plant a few inches above the root, from which it issues.

Q. How is the carbonate of magnesia to be prepared?

A. Take of *sulphate of magnesia* a pound, *sub-carbonate of potass* nine ounces, *water* three gallons; dissolve separately the sub-carbonate of potass in three pints of the water, the sulphate of magnesia in five pints of water, and filter them; then add the remaining water to the liquor of sulphate of magnesia, and boil, and mix with it, whilst boiling, the other liquor, stirring it assiduously with a rod; then strain through linen; lastly, wash the powder with the frequent affusion of hot water, and dry it with a heat of two hundred degrees upon blotting paper.

Q. What decompositions are effected in preparing carbonate of magnesia?

A. *Sulphate of magnesia, sub-carbonate of potass,* and *water* are used: the potass forms with the sulphuric acid of the magnesia a soluble *sulphate of potass,* while its carbonic acid combines with the magnesia forming an insoluble *carbonate of magnesia.*

Q. What articles enter the compound extract of colocynth?

A. Pulp of colocynth, extract of spiked aloes, gum resin of scammony, cardamom-seeds, and proof spirit.

Q. What are the virtues of the compound extract of colocynth?

A. Cathartic and stimulant: dose from five grains to thirty.

Q. How is the red sulphuret of mercury to be prepared?

A. Take of *purified mercury,* by weight, forty ounces; *sublimed sulphur* eight ounces; admix the mercury with the sulphur dissolved over the fire, and as soon as the mass swells, remove the vessel from the fire and cover it strongly, in case it should inflame, then powder and sublime it.

Q. What are the virtues of the hydrargyri oxydum rubrum?

A. Antisyphilitic and stimulant, *externally* escharotic: dose from one-eighth of a grain to a grain.

Q. What change takes place in forming the red sulphuret of mercury?

A. The mercury being oxidized, unites intimately with the sulphur by the assistance of heat.

Q. How is the carbonate of potass to be prepared?

A. Take of *sub-carbonate of potass* (from tartar) a pound; *sub-carbonate of ammonia* three ounces, *distilled water* a pint; add the sub-carbonate of ammonia to the potass dissolved in the water; then by a sand-bath apply a temperature of one hundred and eighty degrees for three hours, or until the ammonia shall be expelled; lastly, set it aside that it may crystallize. In a similar manner let the remaining liquor be evaporated, that when set aside crystals may again form.

Q. What are the virtues of the carbonate of potass?

A. Diuretic and antacid: dose from ten grains to half a drachm.

Q. What changes take place in preparing the carbonate of potass?

A. *Sub-carbonate of potass* and *sub-carbonate of ammonia* are employed. The ammonia is expelled by the assistance of heat, and its carbonic acid is taken up by the potass, an imperfect *carbonate of potass* being thus formed.

Q. What salt remains in the retort after the distillation of nitric acid?

A. A super-sulphate of potass.

Q. What are the virtues of the super-sulphate of potass?

A. Refrigerant and cathartic: dose from a scruple to two drachms.

Q. How is the sulphate of potass to be prepared?

A. Take of the salt which remains after the distillation of nitric acid two pounds, boiling water two gallons; mix, that the salt may be dissolved, then add of *sub-carbonate of potass* as much as may be necessary to saturate the acid, then boil until a pellicle swims on the surface; and, when you shall have strained it, set it aside that crystals may form: the water being poured off, dry these upon blotting paper.

Q. What is a proper dose of the sulphate of potass?

A. From half a drachm to half an ounce.

Q How is the *super-sulphate of potass* thus converted into a *sulphate* by the sub-carbonate of potass?

A. The potass of the sub-carbonate neutralizes the superabundant acid, thus reducing it to a sulphate of potass, and the carbonic acid escapes.

Q. What salt remains in the retort after the distillation of muriatic acid?

A. Super-sulphate of soda.

Q. What is tartarized soda?

A. A triple salt consisting of tartaric acid, soda, and potass.

Q. How is the soda tartarizata to be prepared?

A. Take of *sub-carbonate of soda* twenty ounces, *super-tartrate of potass*, in powder, two pounds; *boiling water* ten pints: dissolve the sub-carbonate of soda in the water, and add, by degrees, the super-tartrate of potass, filter the liquor through paper, then boil until a pelicle may float, and set it aside that it may crystallize. Having poured off the water, dry these upon blotting paper.

Q. What chemical change is effected in making the tartarized soda?

A. *Sub-carbonate of soda; super-tartrate of potass* and *water* being used; the soda gives off its carbonic acid while it unites with the excess of tartaric acid, forming a tartrate of soda and potass.

Q. What salt remains in the retort after the distillation of sub-carbonate of ammonia?

A. Muriate of lime.

Q. To procure lime, lime-stone is directed to be subjected to a fierce heat for an hour: what is the object?

A. To deprive it of its *carbonic acid.*

Q. How is the antimonii sulphuretum precipitatum to be prepared?

A Take of *sulphuret of antimony*, powdered, two pounds; *liquor of potass* four pints; *distilled water* three pints: Mix and boil, with a gentle fire, for three hours, continually stirring it, and adding from time to time, distilled water, so that it may always fill the same measure; filter the liquor immediately through folded linen, and drop into it gradually, whilst hot, as much diluted sulphuric acid as may be sufficient to precipitate the powder; then wash the sulphate of potass with warm water, dry the precipitated sulphuret of antimony, and rub it into a fine powder.

Q. What are the virtues of the precipitated sulphuret of antimony?

A. Alterative and diaphoretic, emetic and cathartic, agreeable to the quantity given: dose from one grain to five.

Q. What is the systematic name of the plant which affords us the calami radix?

A. Acorus calamus.

Q. How is the antimonium tartarizatum to be prepared?

A. Take of *sulphuret of antimony* powdered two pounds; *nitrate* of *potass* an ounce; *sulphuric acid*, by weight, two ounces; *distilled water* a pint and a half; mix the acid with half a pint of the water, in a proper glass vessel, and heat it in a bath of sand. When moderately heated, add by degrees the sulphuret and nitrate mixed together; then filter and boil until all the moisture is consumed. Wash what remains with distilled water, until it becomes tasteless, and mix it, whilst yet wet, with the super tartrate of potass, and throw it into a pint of distilled water: finally, boil down the liquor, and set it aside to crystallize.

Q. What are the virtues of tartarized antimony?

A. Emetic, diaphoretic, and expectorant.

Q. As an emetic how much may be exhibited?

A. From one grain to three.

Q. How much tartarized antimony would you give as a diaphoretic?

A. From one-eighth of a grain to half a grain.

Q. In preparing tartarized antimony, what chemical changes and decompositions are effected?

A. *Sulphuret of antimony*, *nitrate of potass*, *super tartrate of potass*, *sulphuric acid*, and *water*, are used. The antimony decomposes the nitrate of potass, and becomes oxidized at the expense of the nitric acid, forming a *prot oxide of antimony;* part of the sulphuric acid is supposed to act upon this prot oxide, if so, a subsulphate of antimony and potass is the result.

The supertartrate of potass being added, and the whole thrown into water, a triple salt is obtained in solution, consisting of tartaric acid, antimony and potass. The sulphur of the sulphuret is left on the filter in the early stage of the process.

Q. What is the systematic name of the plant which affords olibanum?

A. Juniperus lycia.

Q. How is the tincture of muriate of iron to be prepared?

A. Take of *sub-carbonate of iron* half a pound, *muriatic acid* a pint, and *rectified spirit* three pints; pour the acid upon the sub carbonate of iron in a glass vessel, and shake it from time to time for three days; set it aside, that the dregs, if there be any, may subside; then pour off the liquor, and add to it the spirit.

Q. What are the virtues of the tinctura ferri muriatis?

A. Tonic and emmenagogue; dose from five drops to twenty.

Q. In preparing the tinctura ferri muriatis, what takes place?

A. *Sub-carbonate of iron*, *muriatic acid*, and *rectified spirit*, are used; while the iron forms with the muriatic acid a *muriate of iron*, its carbonic acid escapes, the muriate is then dissolved by the spirit.

Q. How is the black sulphuret of mercury to be prepared?

A. Take of *purified mercury*, by weight, a pound, *sublimed sulphur* a pound; rub them together until globules are no longer to be seen.

Q. In making the hydrargyri sulphuretum nigrum, what change does the mercury undergo?

A. It is slightly oxidized, and mechanically mixed with the sulphur.

Q. What is the medical virtue of the black sulphuret of mercury?

A. Alterative; dose from five grains to a scruple.

Q. How is the sulphate of zinc to be prepared?

A. Take of *zinc*, broken into small pieces, three ounces, *sulphuric acid* by weight five ounces, *water* four pints; mix in a glass vessel, and the effervescence having ceased, strain the liquor through paper, then boil down until a pellicle floats, and set it aside to crystallize.

Q. What are the virtues of the zinci sulphas?

A. Emetic, tonic, and astringent.

Q. As an emetic, how much sulphate of zinc may be given?

A. From five grains to twenty.

Q. As a tonic and astringent, what would be your dose?

A. From half a grain to three grains.

Q. What articles enter the vinum aloes?

A. Extract of spiked aloes, canella bark, wine, and proof spirit.

Q. In preparing the vinum opii what do you employ?

A. Extract of opium, cinnamon bark, cloves, and wine.

Q. Name the wines of the pharmacopœia?

A. The vinum aloes, vinum ipecacuanha, vinum opii, and vinum veratri.

Q. How is the liquor of alkaline iron to be prepared?

A. Take of *iron* two drachms and a half, *nitric acid* two fluid ounces, *distilled water* six fluid ounces, and *liquor of sub-carbonate of potass* six ounces; pour the acid and water, mixed together, upon the iron, then, when bubbles shall cease to come forth, pour off the liquor as yet acid; add this by degrees, and at intervals, to the liquor of sub-carbonate of potass, repeatedly shaking until it becomes of a brownish red colour, and no more bubbles are excited; lastly, set it aside for six hours, and then pour off the liquor.

Q. What are the virtues of the liquor ferri alkalini?

A. Tonic and emmenagogue; dose from half a drachm to a drachm and half.

Q. In preparing the liquor ferri alkalini, what takes place?

A. *Iron*, *nitric acid*, *water*, and *liquor of sub carbonate of potass* are used: the iron is oxidized at the expense of part of the nitric acid, and is dissolved by the remaining acid as it forms; the sub-carbonate of potass being added gives off its carbonic acid, and the potass forms, with the nitrate of iron a *solution of alkaline iron*.

Q. What is the composition of the ferrum tartarizatum?

A. It consists of tartaric acid, potass, and iron.

Q. What change does the mercury undergo in triturating it with chalk, to form the preparation of *mercury with chalk*?

A. The mercury is slightly oxidized, and mechanically mixed with the carbonate of lime.

Q. How is the white precipitated mercury to be prepared?

A. Take of *oxymuriate of mercury* half a pound, *muriate of ammonia* four ounces, *liquor of sub-carbonate of potass* half a pint, *distilled water* four pints; dissolve first the muriate of ammonia, then the oxymuriate of mercury, in the distilled water, and add to these the liquor of sub-carbonate of potass; wash the precipitated powder until it becomes tasteless, then dry it.

Q. What is the use of this preparation of mercury?

A. Externally, as a detergent.

Q. Give the decompositions and chemical changes in preparing the hydrargyrum præcipitatum album?

A. *Oxymuriate of mercury*, *muriate of ammonia*, *liquor of sub-carbonate of potass*, and *water*, are used. The muriate of ammonia combines with the oxymuriate of mercury, and renders it more soluble in water: thus we obtain a super-muriate of mercury and ammonia; the sub carbonate of potass being added, the potass takes a portion of the muriatic acid, and remains in solution; a muriate of ammonia and mercury being precipitated, the carbonic acid escapes.

Q How is the liquor of sub-acetate of lead to be prepared?

A. Take of *semi-vitreous oxide of lead* two pounds, *acetic acid* a gallon, mix them, and boil down to six pints, continually stirring; then set it by, that the dregs may subside and filter.

Q. What takes place in this process?

A. The acetic acid forms with the lead an acetate of lead, in solution.

Q. What is the theory of the process for making the super-acetate of lead?

A. *Carbonate of lead* and *acetic acid* are used. Whilst the lead forms, with the acetic acid, a *super-acetate of lead* in solution, to be obtained in crystals by evaporation, the carbonic acid is disengaged.

Q. How is the carbonate of soda directed to be prepared?

A. Take of *sub-carbonate of soda* a pound, *sub-carbonate of ammonia* three ounces, *distilled water* a pint; add the ammonia to the sub-carbonate of soda dissolved in water; then with a sand bath apply a heat of 180 degrees for three hours, or until the ammonia shall be expelled; lastly, set it aside that crystals may form. In the same manner let the remaining liquor be evaporated, and set aside that it may crystallize again.

Q. Give the theory of this process?

A. The ammonia being driven off by the heat employed, its carbonic acid supplies the sub-carbonate of potass, and a carbonate is thus formed.

Q. Of what use is the preparation of potass with lime?

A. It is employed as an escharotic.

Q. In making the compound decoction of mallows, what articles are employed?

A. Dried mallows, dried camomile flowers, and water.

Q What are the virtues of the extractum taraxaci.

A. Diuretic and deobstruent; dose from ten grains to a drachm.

Q. What is the systematic name of the plant which affords us taraxaci radix?

A. Leontodon taraxacum.

Q. What are the virtues of the leaves of the whortleberry?

A. Tonic and diuretic; dose from ten grains to a drachm.

Q. What is the name of the plant which affords us the uvæ ursi *folia*?

A. Arbutus uva ursi.

Q. What are the virtues of elm bark?

A. Astringent and diuretic; dose from ten grains to a drachm.

Q. What is the officinal name of the tree from which the cortex ulmi is obtained?

A. Ulmus campestris.

Q. What is the specific gravity of proof spirit?

A. To that of water as .930 to 1,000.

Q. What is the specific gravity of rectified spirit?

A. To that of water as .835 to 1.000.

Q. In preparing the precipitated sulphuret of antimony what is effected?

A. *Sulphuret of potass, liquor of potass, water* and *sulphuric acid* are used. The water being decomposed into its constituents hydrogen and oxygen, the potass unites with the sulphur, and with hydrogen from the water forms an hydro-sulphuret of potass. The antimony being oxidized by the oxygen of the water, is dissolved by the hydro-sulphuret of potass; on adding the sulphuric acid it unites with the potass, hydrogen escapes, and the oxide of antimony is precipitated, minutely blended with sulphur, and some sulphuretted hydrogen.

Q. What are the virtues of the precipitated sulphuret of antimony?

A. Alterative and diaphoretic; dose from one grain to five.

Q. In what cases are the preparations of digitalis useful?

A. In inflammatory diseases, phthisis, active hæmorrhages, and dropsies.

Q. Name the preparations of catechu?

A. The extract, infusion, and tincture.

Q. In what cases is catechu of service?

A. In diarrhœas and intestinal hæmorrhages, and locally in ulceration of the gums, relaxation of the uvula, aphthæ, &c.

Q. What are the medical virtues of saffron?

A. Diaphoretic, stimulant; dose from five grains to thirty.

Q. In what cases may it be exhibited with any success?

A. In hysteria, and other nervous cases.

Q. What officinal preparations do saffron enter?

A. The syrupus croci, confectio aromatica, pilulæ aloes cum myrrha, tinctura aloes composita, tinctura cinchonæ composita, tinctura rhei, and the tinctura rhei composita.

Q. What are the officinal preparations of chalk?

A. The mistura cretæ, hydrargyrus cum creta, and pulvis cretæ compositus.

Q. What are the properties of chalk?

A. Internally antacid, externally absorbent.

Q. In what diseases may the ferrum ammoniatum be administered with advantage?

A. In cases of hysteria, chlorosis, epilepsy, scrofula, &c. &c.

Q. What preparation of iron is used in the pilulæ ferri cum myrrha?

A. A sulphate of iron.

Q. In what cases is sulphate of iron of service?

A. In all diseases attended with universal debility, diabetes, amenorrhœa, &c. &c.

Q. What are the virtues of guaiacum?

A. Diaphoretic, stimulant; in large doses it possesses purgative properties; dose from five grains to a scruple, or as a purgative to two scruples.

Q. In what complaints is guaiacum generally employed?

A. In gout, cutaneous diseases, and chronic rheumatism.

Q. What are the uses of the liquor ammoniæ acetatis?

A. *Internally* in inflammatory and febrile diseases; *externally*, properly diluted, as a collyrium, or as an injection in the early stage of gonorrhœa, and as a lotion to inflamed surfaces, &c. &c.

Q. In what officinal preparations is sulphuric acid used?

A. The ferri sulphas, acidum sulphuricum dilutum, hydrargyri oxymurias, and zinci sulphas.

Q. What preparation of the pharmacopœia does the diluted sulphuric acid enter?

A. The infusum rosæ.

Q. What are the virtues of the infusum rosæ?

A. Refrigerant and sub-astringent; dose from an ounce to half a pint?

Q. What are the virtues of the hellebori fœtidi folia?

A. Cathartic and anthelmintic; very seldom used.

Q. What are the virtues of humuli strobili?

A. Diuretic, anodyne, narcotic; dose from five grains to a scruple.

Q. Name the officinal preparation of hops?

A. The tinctura humuli, and the extractum humuli?

Q. What are the officinal preparations of the cascarillæ cortex?

A. The tinctura cascarillæ and infusum cascarillæ.

Q. Name the officinal preparations camphor is employed in.

A. The mixtura camphoræ, spiritus camphoræ, tinctura camphoræ composita, linimentum camphoræ, linimentum camphoræ compositum, linimentum hydrargyri, and linimentum saponis.

Q. What officinal preparations do the cardamomi semina enter?

A. The extractum colocynthidis compositum, tinctura cardamomi, tinctura cinnamomi, tinctura gentianæ composita, tinctura rhei, tinctura sennæ, spiritus ætheris aromaticus, confectio aromatica and pulvis cinnamomi compositus.

Q. What articles enter the compound tincture of benzoin?

A. Benzoin, storax balsam, balsam of tolu, extract of spiked aloes, and rectified spirit.

Q. What substances are employed in preparing the tincture of catechu?

A. Extract of catechu, cinnamon bark, and proof spirit.

Q. What preparations does the cassiæ pulpa enter?

A. The confectio cassiæ and confectio sennæ.

Q. What articles are used in making the infusum rosæ?

A. French rose petals, boiling water, diluted sulphuric acid, and double refined sugar.

Q. In what cases may the bistoræ radix be employed with advantage?

A. In Diarrhœas and internal hæmorrhages.

Q. How is the sulphuret of potass to be prepared?

A. Take of *washed sulphur* an ounce, *sub-carbonate of potass* two ounces; rub them together, put them into a close crucible over the fire, until union is effected.

Q. In preparing the sulphuret of potass what takes place?

A. *Washed sulphur* and *sub-carbonate* of *potass* are used. The sulphur combines with the potass, forming a sulphuret of potass, and the carbonic acid is driven off.

Q. How is the precipitated sulphur to be prepared?

A. Take of *sublimed sulphur* a pound, *fresh lime* two pounds, *water* four gallons; boil the sulphur and lime together in the water; then filter through paper, and drop into it a sufficient quantity of muriatic acid to precipitate the sulphur. Lastly, wash this by the frequent affusion of water until it becomes tasteless.

Q. What are the virtues of the precipitated sulphur?

A. Diaphoretic, stimulant, and laxative; dose from half a drachm to two drachms.

Q. What is effected in making precipitated sulphur?

A. The sulphur attracts a portion of hydrogen from the water, and unites with the lime, forming an hydroguretted sulphuret of lime in solution; the muriatic acid then enters into combination with the lime, forming *muriate of lime* in solution, sulphuretted hydrogen gas escapes, and the sulphur is precipitated.

Q. Name the preparations of sulphur?

A. The potassæ sulphuretum, sulphur lotum, sulphur præcipitatum, unguentum sulphuris, unguentum sulphuris compositum, sulphur sublimatum.

Q. What is the proportion of mercury in the pilulæ hydrargyri?

A. There is one grain of mercury in three grains of the pill.

Q. In thirty-six grains of the confectio opii how much opium is there?

A. One grain.

Q. How much opium do five grains of the pilulæ saponis cum opio contain?

A. One grain.

Q. What are the virtues of the pulvis cornu usti cum opio?

A. Anodyne; dose from one grain to ten.

Q. What quantity of opium do ten grains of the pulvis cornu usti cum opio contain?

A. One grain.

Q. What is the proportion of opium in the compound powder of chalk with opium.

A. There is one grain of opium in two scruples of the powder.

Q. What are the virtues of the pulvis cretæ compositus cum opio?

A. Anodyne and absorbent; dose from five grains to two scruples.

Q. How much mercury does six drachms of the liniment of mercury contain?

A. One drachm.

Q. In what proportion does arsenic enter the arsenical liquor?

A. One grain of oxide of arsenic in two fluid drachms of the liquor.

Q. What substances are employed in preparing the mistura guaiaci?

A. Gum resin of guaiacum, refined sugar, mucilage of acacia gum, and cinnamon water.

Q. What enters the ammoniated tincture of bark?

A. Lance-leaved cinchona bark and aromatic spirit of ammonia.

Q. In preparing the mercurial ointment does the mercury undergo any change?

A. Yes, it becomes oxidized.

Q. In preparing the ointment of nitrate of mercury what changes and decompositions take place?

A. *Purified mercury*, *nitric acid*, prepared *lard*, and *olive oil* are used : the mercury is oxidized at the expence of part of the nitric acid, and unites with the remaining acid, forming a nitrate of mercury.

Q. In what proportion does opium enter the compound powder of kino ?

A. One grain to a scruple of the powder ?

Q. In three grains of mercury with chalk how much mercury is there ?

A. One grain.

Q. In one ounce of liquor of oxymuriate of mercury, how much oxymuriate is there ?

A. Half a grain.

Q. What is the proportion of mercury in the strong mercurial ointment ?

A. One drachm of mercury in two drachms of the ointment ?

Q. What is the strength of the mild mercurial ointment.

A. Six drachms of the ointment contain one drachm of mercury.

ANATOMY OF THE VISCERA,

PHYSIOLOGY,

&c. &c.

Q. How is the circulation of the blood effected?

A. By the alternate contraction of the auricles and ventricles of the heart.

Q. What is meant by the diastole of the heart?

A. The dilatation of the ventricles occasioned by the contraction of the auricles.

Q. What do you understand by the systole of the heart?

A. The contraction of the ventricles by which the blood is propelled through all the arteries.

Q. Describe the circulation of the blood.

A. The blood is returned by the superior and inferior vena cava into the right auricle of the heart, which contracts and emits it into the right ventricle; by the same action it is propelled through the ramifications of the pulmonary artery into the lungs, and from thence by the four pulmonary veins into the left auricle, which contracts, and throws the blood into the left ventricle, and the ventricle being thus distended, also contracts, propelling its contents through the aorta into the system, again returning it into the two venæ cavæ, to undergo a similar process.

Q. During the passage of the blood through the lungs, what particular change is effected?

A. It gives off carbonic acid gas, and attracts oxygen and caloric.

Q. What are the parts peculiar to the fœtal circulation?

A. The foramen ovale of the heart, the canalis arteriosus, the canalis venosus, the funis, or umbilical cord, the umbilical vein, and two umbilical arteries.

Q. How is the fœtal circulation performed?

A. The fœtus receives the blood by the umbilical vein, the greater part of it passing through the liver, and the rest by the ductus venosus into the vena cava, and thus to the right auricle of the heart; from thence part of it passes into the right ventricle, and the rest through the foramen ovale into the left auricle. A portion of that which goes into the right ventricle proceeds through the pulmonary artery to the lungs, but the greater part into the aorta by the canalis arteriosus. The blood which has reached the lungs is transmitted by the pulmonary veins into the left auricle, and from thence, with that received through the foramen ovale, into the left ventricle, which propels it through the aorta into the system. The mother receives the blood by the umbilical arteries.

Q. Enumerate the contents of the abdomen.

A. The abdomen contains the peritoneum, stomach, liver, intestines, spleen, pancreas, kidneys, ureters, bladder, and part of the organs of generation.

Q. What is the use of the peritoneum?

A. It is a thin membrane which is reflected over, covers, and supports all the abdominal viscera.

Q. How is the liver situated?

A. Under the diaphragm, nearly filling the right hypochondrium, part of it being in the epigastrium, and terminating in the left hypochondrium.

Q. How many lobes has the liver?

A. Three:—The right and left lobes, and the lobulus spigellii.

Q. Which is the largest lobe?

A. The right.

Q. How is the right lobe of the liver divided from the left?

A. Superiorly by a membranous ligament called the ligamentum latum, and inferiorly by a great scissure.

Q. What is the situation of the gall bladder?

A. It is situated in a fissure in the anterior part of the inferior surface of the great lobe of the liver.

Q. What is the office of the liver?

A. To secrete the bile.

Q. What is the use of the bile?

A. It excites the peristaltic motion of the intestines, and assists in chylification.

Q. What are the principal vessels of the liver?

A. The hepatic artery, vena portæ, hepatic veins, the exeretery ducts and absorbents.

Q. What is the name given to the minute terminations of the vena portæ, which ramify in the liver, and in which the bile is secreted?

A. The terminations are called folliculi or acini, in which the bile is secreted.

Q. Whence do the pori biliarii, or excretory ducts, arise, and how do they terminate?

A. The excretory ducts, or pori biliarii, commence from the folliculi or acini, and terminate in the ductus hepaticus.

Q. How does the hepatic duct terminate?

A. After joining the ductus cysticus from the gall bladder, it terminates in the duodenum.

Q What vessels supply the liver with blood?

A. The hepatic artery and vena portæ.

Q. How is the blood carried from the liver?

A. By the hepatic veins to the inferior cava.

Q. Which is the nutrient artery of the liver?

A. The hepatic artery.

Q. What nerves supply the liver?

A. The liver derives its nerves from the great sympathetic and eighth pair.

Q. What is there peculiar to the vessels of the liver?

A. They are surrounded by a peritoneal covering called Glisson's capsule.

Q. What are the names of the ducts which open on the inside of the first incurvation of the duodenum?

A. There are two which pierce the duodenum, the *ductus communis choledochus,* and the *ductus pancreaticus.*

Q. Describe the secretion and course of the bile.

A. The bile being secreted in the acini of the liver, by the extremities of the vena portæ, passes through the pori biliarii and hepatic duct into the ductus communis choledochus, and then part of it by the cystic duct into the gall bladder.

Q. When the bile leaves the gall bladder, how does it reach the intestines?

A. It returns through the cystic duct into the ductus communis choledochus, and, with the fresh bile from the hepatic duct, passes into the duodenum.

Q. How many ligaments has the liver?

A. Five: – 1, Broad ligament, or ligamentum latum; 2, the round ligament, or ligamentum rotundum; 3 and 4, the right and left lateral ligaments; and 5, the coronary ligament.

Q. Describe the stomach.

A. The stomach is a membranous bag, in which the food is received and digested; it is situated in the left hypochondrium and epigastrium.

Q. Give the division of the abdomen.

A. The abdomen is divided into three regions:—1, A superior or epigastric; 2, a middle or umbilical; and, 3, an inferior or hypogastric region.

Q. How many openings has the stomach?

A. Two; a superior or cardiac opening; and an inferior or pyloric opening.

Q. What are the relative situations of the cardia and pylorus?

A. The pylorus is situated lower, and is turned more forward than the cardia, terminating in the intestines.

Q. At which extremity of the stomach is the cardia situated?

A. At the superior part, near its greater extremity.

Q. Where is the pylorus situated?

A. At the inferior or lesser extremity.

Q. What curvatures has the stomach, and how are they situated?

A. The stomach has two curvatures; a small one superiorly, and a greater curvature inferiorly.

Q. How many coats has the stomach, and of what nature are they?

A. The stomach has four coats:—1, A peritoneal or external coat; 2, a muscular coat next; 3, a nervous coat; 4, a villous or internal coat.

Q. What is there peculiar to the muscular coat of the stomach?

A. It has two planes of fibres; the external running longitudinally, and the internal transversely.

Q. How are the *rugæ* to be observed on the internal surface of the stomach formed?

A. By the two internal coats of the stomach being more extensive than the two external coats, they are necessarily thrown into folds or rugæ.

Q. Whence does the stomach derive its nerves?

A. From the eighth pair, and great sympathetic.

Q Whence are the arteries of the stomach derived?

A. From the cœliac artery.

Q. Describe the vena portæ.

A. The vena portæ is a large vein, peculiar to the liver, which has two sets of branches; the one called the *vena portæ abdominalis*, ramifying over the stomach, spleen, pancreas, and intestines, with their respective arteries, and receiving their blood; the other, the *vena portæ hepatica*, distributed in the liver, and terminating in the hepatic veins.

Q. By what veins is the trunk of the vena portæ formed?

A. By three:—1, The vena mesenterica major; 2, vena mesenterica minor, or hæmorrhoidales interna; 3, vena splenica.

Q. How are the intestines divided?

A. Into large and small;—the small consisting of the duodenum jejunum and ilium; the large of the cæcum, colon, and rectum.

Q. How are the fæces prevented returning back into the small intestines, after they have reached the large?

A. By a pair of valves situated at the termination of the ilium, which may be called the valvulæ coli, valvulæ cæci, or valvulæ ilii.

Q. How many coats have the intestines?

A. Three:—a peritoneal, muscular, and a villous coat.

Q. Which is the broadest of the small intestines?

A. The duodenum.

Q. Where does the mesentery arise?

A. Near to the termination of the duodenum.

Q. What is the use of the mesentery?

A. To form a bed for the vessels, glands, and nerves of the intestines, to cover and support them in their proper situations, &c. &c.

Q. What are the nerves of the mesentery?

A. Branches of the great intercostals, and par vagum.

Q. How is the mesentery formed?

A. Of two laminæ of the peritoneum.

Q. What is the name given to the excretory duct of the kidney?

A. It is called the ureter.

Q. What is the course of the ureter?

A. It descends obliquely from the kidney to the sides of the anterior part of the os sacrum, passing between the rectum and bladder, and terminating in the bladder in an oblique manner.

Q. What is the substance of the kidney?

A. It consists of an external or cortical, and an internal or medullary substance.

Q. What is there peculiar to the cortical substance of the kidney?

A. It secretes the urine.

Q. How many coats has the testicle?

A. Two:—the tunica vaginalis; and the tunica albuginea.

Q. Whence does the ureter arise, and where does it terminate?

A. It arises at the pelvis of the kidney, and terminates in the bladder.

Q. What is the artery of the kidney called?

A. The emulgent; it arises from the aorta.

Q. What nerves supply the kidney?

A. Branches of the eighth pair, and intercostal.

Q. What are the internal parts of the thorax?

A. The pleura, lungs, thymus gland, œsophagus, ductus thoracicus, pericardium, heart, arch of the aorta, venæ cavæ, vena azygos, descending aorta, par vagum, and great intercostal nerves.

Q. What is the use of the pleura?

A. To line the cavity of the thorax, to cover the lungs, to divide the thorax into two cavities, and moisten its surface by the exhalation of vapour.

Q. What is the mediastinum?

A. It is a duplicature of the pleura, which divides the cavity of the thorax.

Q. What parts compose the thorax?

A. The dorsal vertebræ, ribs, sternum, pleura, intercostal muscles, and the diaphragm.

Q. How many cavities has the mediastinum?

A. Three:—an anterior, middle, and posterior cavity.

Q. What is contained in the anterior cavity of the mediastinum?

A. The thymus gland in the fœtus.

Q. What is found in the middle cavity?

A. The heart and pericardium.

Q. What does the posterior cavity contain?

A. The bronchia; œsophagus; descending aorta; part of the intercostal arteries; the descending cava; vena azygos; thoracic duct; par vagum, and the great sympathetic nerve.

Q. Whence does the pleura derive its arteries?

A. From the intercostals and bronchial.

Q. What is the pericardium?

A. A membranous bag which surrounds the heart.

Q. How is the heart divided?

A. Into a *basis* turned backwards and upwards; an *apex* pointing forward and to the left; an *acute edge* to the left; a *rounded edge* to the right; a *convex* surface superiorly; and *flat* surface inferiorly; and it has four cavities, two auricles, and two ventricles.

Q. Is there any communication between each auricle or the ventricles?

A. No; but the right auricle and ventricle open into each other, as also the left auricle and ventricle. In the fœtus, however, the auricles communicate by an opening called the foramen ovale.

Q. How is the right auricle of the heart divided from the left?

A. By the septum auricularum.

Q. What vessels open into the right auricle?

A. The two venæ cavæ, and the coronary vein.

Q. What are the transverse fibres on the sides of the right auricle called?

A. The musculi pectinati.

Q. What is the situation of the tuberculum loweri?

A. Between the mouths of the venæ cavæ.

Q. What is the use of the tuberculum loweri?

A. It directs the blood into the auricle, and prevents the blood of one cava rushing upon that of the other.

Q. What are the situations of the venæ cavæ?

A. The superior vena cava opens into the upper posterior part of the right auricle, and the inferior cava into the lower posterior part.

Q. What part of the auricle does the coronary vein enter?

A. The inner and inferior part, at the opening of which is placed a semilunar valve.

Q. What is the valve of Eustachius?

A. It is a fold of the inner membrane placed to the left of the inferior cava.

Q. When the blood has reached the right ventricle, how is it prevented returning into the auricle?

A. By the tricuspid valve, situated within the ventricle at the opening of the auricle.

Q. Where is the mitral valve situated?

A. In the left ventricle, at the communication of the auricle.

Q. What is the use of the valvula mitralis?

A. It prevents the reflux of blood into the left auricle after it has entered the ventricle.

Q. What are the carneæ columnæ?

A. Fleshy pillars, by the action of which the ventricles are closed.

Q. What name is given to the tendons of the carneæ columnæ?

A They are called chordæ tendineæ, which are attached to the edges of the valves.

Q. Give the situation of the opening of the pulmonary artery.

A. It is situated at the upper and left side of the right ventricle.

Q. When the blood has entered the pulmonary artery, what prevents its return to the ventricle?

A. Three semilunar valves; similar valves also prevent the blood returning from the aorta into the left ventricle.

Q. What arteries nourish the substance of the heart?

A. The two coronary arteries, which arise from the aorta above the semilunar valves.

Q. Whence does the heart derive its nerves?

A. From the cardiac plexus.

Q. What veins empty themselves into the left auricle?

A. The four pulmonary veins from the lungs.

Q. How many lobes has the right lung?

A. The right lung has three lobes, whereas the left has only two.

Q. What is there peculiar to the lower edge of the left lung?

A. There is a notch formed by the apex of the heart.

Q. What are the nutrient arteries of the lungs?

A. The bronchial arteries, which return their blood by the bronchial veins into the vena azygos, or guttural vein.

Q. Whence are the nerves of the lungs derived?

A. From the eighth pair and great sympathetic.

Q. What is the use of the omentum?

A It is considered that the omentum lubricates the abdominal viscera, and preserves them from injury by friction.

Q. Which are the two principal arteries of the body?

A. The *pulmonary*, which arises from the right ventricle of the heart; and the *aorta*, from the left ventricle: all other arteries being branches of these two.

Q. What arteries supply the head?

A. The two carotid arteries; the right arising from the arteria innominata, and the left from the aorta.

Q. Where do the carotid arteries divide?

A. Before the os hyöides, the carotid arteries divide into the *external* and *internal*.

Q. What are the branches of the external carotid?

A. Anteriorly, 1, the superior thyroideal; 2, the lingual; 3, the external maxillary or labial; 4, the transverse facial: posteriorly, 5, the occipital; 6, the posterior auris; 7, interiorly, the ascending pharyngeal; 8, it then divides into the temporal; and 9, the internal maxillary.

Q. What branches does the internal carotid give off?

A. 1. The opthalmic; 2, the communicans; 3, the anterior cerebri; 4, the media cerebri.

Q. What branches does the arch of the aorta give off?

A. Three:—1, The arteria innominata; 2, the left carotid; 3, the left subclavian.

Q. What arteries are given off by the thoracic aorta?

A. 1, The bronchial; 2, the œsophageal; 3, the intercostal arteries.

Q. What arteries does the abdominal aorta give off?

A. 1, The phrenic; 2, cæliac; 3, superior mesenteric; 4, emulgent; 5, spermatic; 6, inferior mesenteric; 7, lumbar; 8, sacral; 9, iliac arteries.

Q. Where are the phrenic arteries distributed?

A. On the diaphragm and neighbouring parts.

Q. What are the branches of the cæliac?

A. 1, The coronary of the stomach; 2, the hepatic; 3, the splenic.

Q. What are the branches of the hepatic artery?

A. 1, The pylorica, or coronaria dextra; 2, the gastro-epiploica dextra; 3, the cystic arteries; it then divides into two branches, sending one to the right and the other to the left lobe of the liver.

Q. What are the branches of the splenic artery?

A. It gives off several branches to the pancreas, then the gastro epiploica sinistra, the vasa brevia, and four or five branches terminating in the spleen.

Q. What are the principal branches of the inferior mesenteric artery?

A. 1, The colica sinistra; 2, branches to the sigmoid flexure of the colon; 3, the arteria hæmorrhoidalis interna to the rectum.

Q. Where do the emulgent arteries arise?

A. From the sides of the aorta, directly under the superior mesenteric,—one for each kidney.

Q. Do they enter the kidneys behind or before the emulgent vein?

A. Behind the vein.

Q. Which is the longest artery, the right emulgent or left?

A. The right is the longest.

Q. What are the branches of the superior mesenteric artery?

A. In its course it gives off sixteen or eighteen branches, principally to the small intestines. The first considerable branch is the colica dextra, which communicates with the inferior mesenteric; the next principal branch is the ilio colica, which supplies the ileum and first of the colon.

Q. Whence does the superior mesenteric artery arise?

A. From the fore part of the aorta, below the cœliac artery.

Q. How is the brain divided?

A. Into the cerebrum and cerebellum.

Q. How many membranes has the brain?

A. Three:—1, the dura mater; 2, the tunica arachnoides; 3, and the pia mater.

Q. How many layers has the dura mater?

A. Two; an external and internal layer.

Q. What are the processes of the dura mater, and how are they formed?

A. The dura mater has four processes, formed by duplicatures of its internal lamina:—1, The *falx cerebri*, passing between the hemispheres of the cerebrum; 2, the *tentorium*, dividing the cerebrum from the cerebellum; 3, the *falx cerebelli*, between the hemispheres of the cerebellum; 4, the *sphenoidal folds*; two *anterior*, separating the anterior from the middle lobes of the cerebrum; and two *lateral*, forming the fossula for the pituitary gland.

Q. What are the arteries of the dura mater?

A. They are called the anterior, middle, and posterior meningeal arteries; the *anterior* arising from the orbit, the middle from the external carotid, and the posterior from the vertebral arteries.

Q. How many ventricles has the brain?

A. Five.

Q. Where is the fifth ventricle situated?

A. Between the laminæ of the septum lucidum.

Q. How are the lateral ventricles situated?

A. Under the corpus callosum and medullary arches of the cerebrum.

Q. What is the situation of the cerebrum?

A. It is situated above the tentorium, occupying the superior division of the cavity of the cranium.

Q. How is the cerebrum divided?

A. Into two lateral portions, which are termed hemispheres; and below, into two anterior, two middle, and two posterior lobes.

Q. What is the fissure between the anterior and middle lobes called?

A. The fissuro magna silvii.

Q. Where is the situation of the corpus callosum?

A. It is situated at the bottom of the fissure which divides the two hemispheres of the cerebrum.

Q. What is understood by the rapha?

A. A groove running on the middle of the corpus callosum, having on each side a small medullary cord, is so called.

Q. What divides the lateral ventricles?

A. The septum lucidum, between the lamina of which is the fifth ventricle.

Q. What is the situation of the fornix?

A. Immediately under the septum lucidum, connected to it at its superior surface, and posteriorly to the corpus callosum.

Q. What is the situation of the choroid plexus?

A. They arise under the anterior part of the fornix, and extend over the whole of the lateral ventricles.

Q. How are the corpora striata situated?

A. At the bottom of the anterior and external part of the lateral ventricles.

Q. What is the substance of the corpora striata?

A. They consist of alternate striæ of medullary and cortical substances.

Q. Where are the thalami nervorum opticorum placed?

A. Between the posterior extremities of the corpora striata.

Q. Where is the tænia semicircularis situated?

A. In the groove formed between the corpus striatum and thalamus on each side.

Q. Where are the pedes hippocampi situated?

A. At the posterior part of the lateral ventricles.

Q. Where is the hippocampus minor situated?

A. In the posterior horn of each lateral ventricle.

Q. How is the *pineal* gland situated?

A. Behind the thalami nervorum opticorum, above the tubercula quadrigemina, under the posterior part of the fornix.

Q. Where are the tubercula quadrigemina situated?

A. Behind the thalami nervorum opticorum, and under the pineal gland.

Q. How many openings are there in the lateral ventricles?

A. Three:—1, The foramen of Monro; 2, the foramen commune anterius, or vulva; 3, the foramen commune posterius, or anus.

Q. Where is the foramen of Monro situated?

A. The foramen of Monro is an opening situated behind the anterior pillars of the fornix, forming a communication between the lateral ventricles.

Q. Where is the third ventricle?

A. Between the thalami nervorum opticorum.

Q. What is the termination of the third ventricle?

A. It terminates in the infundibulum.

Q. What is the name of the canal which passes under the tubercula quadrigemina, and forms a communication between the third and fourth ventricle?

A. Iter à tertio ad quartum ventriculum.

Q. Where is the pituitary gland?

A. In the Sella turcica.

Q. How many lobes has the cerebellum?

A. Two, between which is situated the falx cerebelli.

Q. Where is the fourth ventricle situated?

A. It runs backward and downward along the middle of the cerebellum.

Q. Into what part of the fourth ventricle does the iter à tertio ad quartum ventriculum enter?

A. The iter à tertio ad quartum ventriculum enters the fourth ventricle anteriorly.

Q. How is the medulla oblongata formed?

A. By the union of the crura of the cerebrum and cerebellum.

Q. What is situated at the anterior part of the third ventricle?

A. The anterior crura of the fornix, the commissura, anterior cerebri, and the infundibulum.

Q. Where is the pons varolii?

A. It is situated across the union of the crura cerebri and cerebelli.

Q. What is the name of the membrane which dips down in the convolution of the brain?

A. The pia mater.

Q. Does the tunica arachnoidea pass into the convolutions of the brain also?

A. No; it passes over the brain, and does not enter its substance.

Q. How many coats has the eye?

A. Six:—1, The tunica conjunctiva; 2, the tunica sclerotica; 3, the cornea; 4, the tunica choroides; 5, the iris; and 6, the retina.

Q. What are the humours of the eye?

A. The aqueous, crystalline, and the vitreous.

Q. Which is the most vascular coat of the eye?

A. The tunica choroides.

Q. How many chambers has the eye?

A. It has two, the anterior of which is the largest.

Q. What is the use of the pharynx?

A. Its principle use is to receive the food, and transmit it to the œsophagus.

Q. Describe the spleen.

A. It is a soft fleshy mass, of a purple colour, situated in the left hypochondrium, at the great extremity of the stomach; it is supplied with blood from the splenic artery, a branch of the cæliac; but its use is not at present perfectly known.

Q. What is the situation of the pancreas?

A. It is situated at the back part of the epigastric region, under the stomach, before the spine, the crura of the diaphragm, the aorta, and vena cava.

Q. What is the substance of the pancreas?

A. It is formed of small glandular particles, loosely connected together; it is of a greyish white colour.

Q. What is the situation of the uterus?

A. The uterus is situated between the bladder and rectum.

Q. How many openings has the uterus?

A. Three; two at the angles of its fundus, and one at its neck.

Q. Where does the opening lead to from the cervix of the uterus?

A. Into the vagina.

Q. Where do the other two openings of the uterus communicate?

A. With the fallopian tubes, and are very small.

Q. What arteries nourish the pleura?

A. Branches from the intercostal, diaphragmatic, bronchial, and œsophageal arteries.

Q. By what nerves is the spleen supplied?

A. By branches of the great sympathetic and eighth pair.

Q. What are the properties of healthy bile?

A. It should be of a yellow greenish colour; of a bitter taste; about the consistence of oil; and when shaken, appear frothy, similar to soap and water.

Q. Of how many parts is the blood composed?

A. The blood is composed of three parts:—1. Serum, the lightest; 2. coagulable lymph, or fibrin, the next; 3. the cruor, or red particles, the heaviest.

Q. How is inspiration performed?

A. The Diaphragm contracts and descends; the ribs are raised; the cavity of the thorax being thus enlarged, the air rushes through the trachea into the cells of the lungs.

Q. How is expiration effected?

A. By the relaxation of the diaphragm, and its consequent ascent, and by the descent of the ribs; the cavity being thus lessened, the air is driven out.

Q. What is the standard of animal heat in the human body?

A. About 95° of Fahrenheit's thermometer.

Q. How is nutrition accomplished?

A. By the lacteals, which select the chyle from the excrementitious portion of the food, and convey it into the thoracic duct.

Q. When the fæces have reached the large intestines, how are they prevented returning into the small?

A. By the valvula coli, situated at the commencement of the colon.

Q. By what action is the bile forced into the duodenum?

A. When the stomach is full, by pressure of the neighbouring viscera, and partly by the contraction of the gall bladder itself.

Q. What is the principal agent in digestion?

A. The gastric juice.

Q. What prevents the food from passing into the duodenum before it is properly digested?

A. The sphincter pylori.

Q. By what powers are the fæces expelled?

A. The abdominal and diaphragmatic muscles, the muscular coat of the rectum, and the levator ani, &c.

Q. How is the urine prevented returning to the kidneys after it has reached the bladder?

A. By the ureter's entering the bladder obliquely, it forms a valve over the orifice of the ureter.

PRACTICE OF PHYSIC.

Q. NAME the classes of diseases agreeable to the arrangement of Dr. Cullen.

A. There are four classes: 1. pyrexiæ, or febrile diseases; 2, neuroses, or nervous diseases; 3, cachexiæ, or cachectic diseases; 4, locales, or local diseases.

Q. What are the orders of the class pyrexiæ?

A. 1. Febres fevers; 2, exanthemata eruptive fevers; 3, phlegmasiæ inflammations; 4, hæmorrhagiæ hæmorrhages; 5, profluvia fluxes.

Q. What are the genera of the order febres?

A. The order febres is divided into continued and intermittent fevers; the *continued* are, 1, synocha inflammatory fever; 2, typhus nervous fever; 3, synochus mixed fever:—the *intermittent* are, quotidiana, every day ague; 2, tertiana, every third day ague; 3, quartana, fourth day ague.

Q. Name the genera of the order exanthemata.

A. 1, Variola, small pox; 2, varicella, chicken-pox; 3, rubeola, measles; 4, scarlatina, scarlet fever; 5, pestis, plague; 6, erysipelas, Saint Anthony's fire; 7, miliaria, miliary fever; 8. urticaria, nettle rash; 9. pemphigus vesicular fever; 10. aphtha, aphthous fever.

Q. Name the genera of the order phlegmasiæ.

A. There are twenty; namely, phrenitis, or inflammation of the brain; ophthalmitis, of the eye; otitis, of the ear; glossitis, of the tongue; cynanche, of the throat; pleuritis, of the pleura; pneumonitis, of the lungs; carditis, of the heart; diaphragmatis, of the diaphragm; hepatitis, of the liver; gastritis, of the stomach; enteritis, of the intestines; splenitis, of the spleen; nephritis, of the kidney; cystitis, of the bladder; hysteritis, of the uterus; prostitis, of the prostrate gland; peritonitis, of the peritoneum; and podagra, gout; rheumatismus, rheumatism.

Q. Name the genera of the order hæmorrhagiæ.

A. Epistaxis, flow of blood from the nose; hæmoptysis, spitting of blood; hæmatemesis, vomiting of blood; hæmorrhois, piles; menorrhagia, flooding; hæmaturia, voiding blood with the urine.

Q. What are the genera of the order profluvia?

A. Catarrhus, catarrh; and dysenteria, dysentery.

Q. How many species of cynanche are there?

A. Five: cynanche tonsillaris, or inflammatory sore throat; cynanche maligna, or putrid sore throat; cynanche trachealis, or croup; cynanche pharyngæa, or inflammation of the pharynx; cynanche parotidæa, the mumps, or inflammation of the parotid gland.

Q. Give the general treatment of cynanche.

A. The early exhibition of emetics is extremely useful; topical, and in some cases general blood-letting; the application of blisters to the neck and throat; saline purges and diaphoretics; stimulant or sedative gargles; the inhalation of the steams of warm water, &c. &c.; and keeping the patient on an antiphlogistic regimen.

Q. Is this the practice you would pursue in cynanche maligna?

A. No; I should exhibit tonics, with diaphoretics; make use of tonic and astringent gargles; and allow my patient a more generous diet.

Q. What are the causes of typhus?

A. Contagion, exposure to a cold damp atmosphere, the passions of the mind, irregular life, impaired constitution, brought on by poor living; the frequent use of spirituous liquors; unwholesome climate; general intemperance, &c.

Q. What are the symptoms of typhus mitior?

A. Loss of appetite, general debility; pains in the head and other parts of the body; lowness of spirits; confused imagination; sickness; pale urine; a white moist tongue, becoming dry, brown, and tremulous; weak quick pulse, at first the heat being little increased, but ultimately becoming so, the urine changing to a high colour; partial cold clammy sweats; delirium; involuntary evacuations; and in a more advanced stage cold extremities and convulsions.

Q. What are the symptoms of gastritis?

A. An acute pain and burning sensation in the region of the stomach; great debility, restlessness, and anxiety; quick, hard, contracted pulse; vomiting, which with the pain is increased on taking any thing into the stomach; frequent hiccough, &c.

Q. How does gastritis terminate?

A. In resolution, suppuration, or gangrene.

Q. When gastritis terminates in gangrene, what are the symptoms?

A. A sudden and great prostration of strength and cessation of the pain, the pulse becoming more rapid and intermitting; coldness of the extremities, delirium, &c.

Q. What are the favourable symptoms in gastritis?

A. About the fourth day the pulse becoming soft and full, the urine depositing a sediment, the pain gradually ceasing, and a gentle diarrhœa supervening.

Q. What treatment would you adopt in gastritis, or inflammation of the stomach?

A. Copious and frequent blood-letting from the amr, applying several leeches over the stomach, using fomentations, warm bath, blisters, emollient and laxative clysters; observing the strictest antiphlogisic regimen.

Q. What are the symptoms which distinguish gastritis from enteritis?

A. The seat of the pain and burning sensation in the stomach, the immediate rejection of food, great depression of strength, &c.

Q. What are the symptoms of enteritis?

A. Acute pain round the navel, extending over the abdomen, which is increased by pressure, attended with heat, thirst, obstinate costiveness, anxiety, nausea, and sometimes vomiting; quick, and very contracted pulse, &c.

Q. How does enteritis terminate?

A. In resolution, ulceration, or gangrene.

Q. How do you know when enteritis has terminated in ulceration?

A. By a remission of the febrile symptoms, occasional rigours and pains, and pus being blended with the evacuations from the bowels.

Q. What treatment would you pursue in enteritis?

A. Bleed freely from the arm, agreeable to the age and constitution of the patient; apply leeches to the abdomen, use warm fomentations, emollient and laxative clysters, and the warm bath; following this treatment by exhibiting cathartics, such as the submuriate of mercury, or a draught composed of infusion of senna and sulphate of magnesia, directing the strictest antiphlogistic regimen to be observed.

Q. What are the symptoms when enteritis terminates in resolution?

A. A gradual abatement of the pain, a general diaphoresis, evacuation of natural fæces, the pulse becoming firm, full, and regular, a free discharge of thick urine, &c.

Q. What are the symptoms of cystitis?

A. Tension, and acute pain over the pubes; tenesmus and pyrexia, a frequent desire of making water, with difficulty in voiding it, sometimes a suppression of it, increase of pain on pressure, &c.

Q. How many species of cystitis are there?

A. Two; acute and chronic.

Q. How does the treatment of acute and chronic cystitis differ?

A. The acute should be treated the same as other phlegmasiæ, by blood-letting; the application of leeches; the use of the warm bath, and fomentations; the exhibition of oleaginous purges and clysters; opium, diaphoretics, &c.: whereas in the chronic species stimulants are proper, such as the balsam of copaiba, and preparations of turpentine; injecting the bladder with emollient decoctions.

Q. What distinguishes acute from chronic inflammation?

A. Its activity, and its recent appearance.

Q. In inflammatory cases, what regimen and diet would you recommend your patient?

A. Strictly antiphlogistic: such as light plain puddings, vegetables, toast and water, acidulous drinks, &c. &c.

Q. When general inflammation is going on, of what description is the pulse?

A. Strong, hard, and rapid.

Q. Is there any thing peculiar in the pulse in enteritis?

A. Yes; it is so much contracted as to be scarcely perceptible.

Q. By what can you determine the bile to be in a vitiated state?

A. An unnatural appearance of the evacuations, the irritable state of the intestines, stomach, &c.

Q. What is understood by dysentery?

A. A spasmodic constriction and ulceration of the colon, retaining the natural fæces, attended with frequent sanguineous and mucal evacuations, tenesmus and fever.

Q. What are the orders of the class neuroses?

A. Comata, adynamiæ, spasmi, and vesaniæ.

Q. What is the general treatment of acute inflammation?

A. Bleeding locally and generally, agreeable to symptoms; exhibiting saline purges and diaphoretics;

employing blisters, fomentations, warm bath, cold affusion, and strictly adopting an antiphlogistic system.

Q. What is the appearance of the urine when active inflammation is going on?

A. It is of a deep colour, and precipitates a red sediment.

Q. What are the symptoms of icterus or jaundice?

A. The skin and tunica conjunctiva of the eye being of a yellow colour, a bitter taste in the mouth, yellow urine, pain in the right hypochondrium, fæces like clay.

Q. How is mania distinguished from phrenitis?

A. By the absence of fever, &c.

Q. What are the symptoms of hydrocephalus?

A. Pyrexia, increased size of the head, convulsions, languor, coma, drowsiness, dilatation of the pupils, redness of the eyes, costiveness, &c.

Q. What is understood by anasarca?

A. A collection of fluid in the cellular membrane of part or whole of the body.

Q. What are the symptoms of nephritis?

A. Pyrexia, an acute pain on the side affected, extending along the course of the ureter; high coloured urine, retraction of the testicle, numbness of the leg, dysuria, micturition, vomiting, &c.

Q. What treatment is proper for nephritis?

A. General and local blood-letting; the exhibition of oleaginous cathartics and diaphoretics; the use of the warm bath, fomentations, and emollient clysters; avoiding *blisters*, as they are apt to produce strangury.

Q. How does nephritis terminate?

A. In resolution, suppuration, or gangrene.

Q. How is an inflammation of the kidney distinguished from lumbago?

A. By the seat of pain, discovered upon pressure by the dysuria and micturition; the vomiting; the pain extending along the ureter and nerve, and it not being increased by motion or an erect posture.

Q. What are the characteristic symptoms of phrenitis?

A. Vehement pyrexia; acute pain in the head; violent delirium; redness of the face and eyes; intolerance of light and sound; watchfulness; hard, small, quick pulse; wild expression of the eyes and countenance; a succession of burning heat and profuse perspiration; dry rough tongue, of a yellow or black colour.

Q. How would you treat a case of phrenitis?

A. I would use the lancet freely, producing a sudden and copious evacuation of blood; apply leeches to the temples, and keep the head (previously shaved) covered with linen clothes, wetted with cold lotions, such as vinegar and water, iced water, or diluted æther; blisters to the head, neck and legs; warm bath, and mustard cataplasms to the feet; exhibit an active cathartic of calomel and extract of colocynth at its commencement, and continue to act upon the bowels with saline purgatives; thus keeping up a constant counter-irritation.

Q. How is cynanche maligna known from cynanche tonsillaris?

A. By the typhoid symptoms, and ulceration attending it.

Q. How is epilepsy distinguished from apoplexy?

A. By the increase of the voluntary motions in epilepsy, and their suspension in apoplexy, and by the stertorous breathing in the latter.

Q. What is the cause of measles?

A. A specific contagion.

Q. How is dysentery known from diarrhœa?

A. By the presence of fever and inflammatory symptoms; the evacuations being sanguineous, mucal, or putrid; but in diarrhœa the motions are feculent, or blended with alimentary matter.

Q. What are the symptoms of pneumonia, or inflammation of the lungs?

A. An obtuse pain in the chest or side, attended with great difficulty of breathing, troublesome cough, hot dry skin; at first a full, strong, quick pulse; as the disease advances becoming weaker, and sometimes intermitting; excessive thirst, flushed countenance, incapacity of lying upon the affected side without great increase of pain.

Q. How is inflammation of the lungs distinguished from inflammation of the pleura?

A. By the pain in pneumonia being more obtuse, and situated under the sternum; the greater difficulty of breathing, and sense of oppression; and the pulse not being so much contracted.

Q. How may inflammation of the lungs be known from inflammation of the liver?

A. Pressure in pneumonia does not increase the pain: in inflammation of the liver it does; in pneumonia the patient cannot lie on the diseased side: in hepatitis the pain is considerably increased by lying on the opposite one.

Q. How is enteritis known from colic?

A. By the pain in enteritis being increased on pressure, and in colic relieved; by the peculiar twisting pain about the navel in cholic, as also the absence of fever in the early stage of the disease.

Q. What are the orders of the class cachexiæ?

A Macores, or emaciations; Intumescentiæ, or swellings; and Impetigines, or cutaneous diseases.

Q. What are the genera of the order macores?

A. Phthisis, or consumption; Tabes, or wasting away with fever; Atrophia, or wasting away without fever.

Q. How is hæmoptysis, or spitting of blood, distinguished from hæmatemesis?

A. By the blood in *hæmoptysis* being *coughed* up, of a florid red colour; whereas in *hæmatemesis* the blood is *vomited* up, of a darker colour, blended with the contents of the stomach, and discharged in considerable quantities.

Q. How would you treat a case of hæmatemesis?

A. If there appeared an inflammatory diathesis, by bleeding in the first instance; exhibiting refrigerants, with small doses of opium, such as the infusion of roses with sulphate of magnesia, &c., following a strict antiphlogistic regimen; if these means did not allay the hæmorrhage, by making use of astringents and tonics, applying a blister to the chest, &c.

Q. What are the general symptoms of internal gangrene?

A. A sudden cessation of pain; a very small and intermitting pulse; a cadaverous appearance of the countenance; great and sudden prostration of strength; cold extremities; vomiting, hiccup, &c.

Q. What are the causes of menorrhagia?

A. Plethora, violent exercise, passions of the mind, and other accidental circumstances, determining the blood to the uterine vessels; excess in venery; the application of cold and wet to the feet; debility of the uterus, arising from frequent child-bearing, protracted labours, or miscarriages; sedentary and inactive life; poor living; warm atmospheres; organic diseases, as polypus, schirrus, ulceration, &c.

Q. What are the characteristic marks of cholera morbus?

A. Violent and frequent discharges of bilious matter, upwards and downwards, attended with acute griping pain.

Q. How may cholera morbus be distinguished from dysentery or diarrhœa?

A. By the evacuations being pure bile, unmixed with blood or mucus.

Q. What are the usual symptoms in cholera morbus?

A. Soreness, pain, nausea, and flatulency in the stomach, acute griping pains in the bowels, quickly followed by violent and frequent vomiting and purging of bilious matter; hurried respiration, thirst, heat; weak, frequent, fluttering pulse; in urgent cases these symptoms are succeeded by cold clammy perspirations, great depression of strength, hurried respiration, considerable anxiety, hiccups, cold extremities, sinking of the pulse, and death.

Q. Name the species of variola.

A. Variola discreta, or the distinct species; variola confluent, or confluent small-pox.

Q. What purges would you exhibit in nephritis?

A. Oleaginous; assisting their operation with emollient clysters.

Q. What are the symptoms of hepatitis, or inflammation of the liver?

A. Pyrexia; tension and pain in the right hypochondrium, increased by pressure and lying on the opposite side; pain in the clavicle and top of the right shoulder; dry cough; vomiting; difficult respiration; shooting pains in the chest; symptoms of jaundice; high coloured urine; obstinate costiveness, or diarrhœa; hiccup, and sometimes other symptoms of gastritis.

Q. How many species of hepatitis are there?

A. Two; the acute and chronic.

Q. How is the chronic species of hepatitis distinguished from the acute?

A. By the very gradual appearance of the symptoms, the enlargement and hardness of the liver, the pain being obtuse, &c.

Q. What are the symptoms of epilepsy?

A. It is usually preceded by a pain in the head, giddiness, noise in the ears, dimness of sight, palpitation of the heart, and flatulency in the stomach. When the fit comes on, the patient falls downs suddenly, and loses all sense of feeling; the eyes are distorted or inverted, so that the whites of them only are seen; the muscles of the whole body are affected with convulsions, particularly those of the face, which are frightfully distorted; these having gradually abated, the patient continues in an apparent state of repose. On recovering himself, he feels very much exhausted, and is ignorant of what has passed during the fit.

Q. Where is the fluid situated in hydro thorax?

A. In the cavity of the pleura, or in the pericardium; sometimes the water is effused in the cellular texture of the lungs, or in small cysts of a membranous structure, which are called hydatids, attached to the internal surface of the pleura, or appearing to float in the cavity.

Q. In pneumonia what treatment would you pursue?

A. Bleed freely at the commencement, repeating it according to symptoms; apply leeches to the chest, following them by a large blister; keeping up a constant counter-irritation by some stimulating ointment, or a renewal of the blister; administer nauseating doses of antimony, and other diaphoretics, with a view to excite the skin and promote expectoration, keeping the bowels gently moved with mild aperients; and in some cases, where much constitutional debility existed, rendering bleeding dangerous, with laborious respiration, frequent coughs, hard quick pulse, dry hot skin, &c. introduce digitalis, in doses agreeable to the age and state of the patient.

Q. Why would you give mild aperients only in pneumonia?

A. Because strong and drastic purgatives have a tendency to diminish the process of expectoration.

Q. How is gout to be distinguished from rheumatism?

A. By the dyspeptic symptoms preceding a fit of the gout; its attacking the smaller joints, and remaining more stationary; or the parts affected being more swollen and red than in rheumatism; the predisposition to the disease, &c.

Q. How would you distinguish typhus mitior from typhus gravior?

A. By the gradual attack and mildness of the symptoms; the *absence* of the symptoms of putrescency, and bilious vomiting, observed in typhus gravior; and by its being accompanied with less heat, thirst, and frequency of pulse.

Q. How many species of measles are there?

A. Willan divides measles into three species: rubeola vulgaris, rubeola sine catarrho, and rubeola nigra; it may be more proper to consider it as *inflammatory* or *putrid.*

Q. What are the symptoms of measles?

A. An inflammatory infectious fever, attended with sneezing, cough, and defluxion of thin humours from the eyes and nose, and a determination of acrid matter to the skin, exciting red spots over every part of the body; disappearing, in ordinary cases, after a few days, in a mealy disquammation of the cuticle.

Q. What disease resembles measles?

A. Scarlatina.

Q. How may scarlet fever be known from measles?

A. The redness of scarlet fever is more diffused, and is not elevated into distinct spots or pimples, as in measles; nor is it attended with cough, sneezing, epiphora, redness of the eyes, and other symptoms of measles.

Q. What are the symptoms of hysteritis?

A. Pyrexia, heat, tension, swelling, and acute pain at the lower part of the abdomen, which is considerably increased on pressure; nausea and vomiting; full, hard, and frequent pulse; vomiting, &c.

Q. What are the indications of cure in enteritis?

A. To allay the inflammatory action, and to keep the bowels open.

Q. How is cynanche tonsillaris known from cynanche maligna?

A. By the strength of the pulse, the absence of ulceration in the throat, the greater difficulty of deglutition, and the attending fever being synochal and not typhoid.

Q. How is varicella distinguished from variola?

A. By its being preceded by little or no fever; by the early appearance of the vesicles, and their being filled with serum about the second or third day; the pustules being formed about the fifth day, and beginning to fall off in scales, at which period the eruption in variola are scarcely completed.

Q. What are the characteristic symptoms of diabetes?

A. Great thirst, voracious appetite, dry harsh skin, costiveness, disinclination to motion, a frequent discharge of urine, containing a large proportion of saccharine and other matter, voided in quantities exceeding that of the aliment or fluid taken; gradual emaciation of the system.

Q. What is the cause of varicella?

A. A specific contagion.

EXPLANATION

OF A FEW

TECHNICAL TERMS.

Acne. Blotched face.

Adynamiæ. The second order of the class Neuroses, the character of which is a diminution of the involuntary motions, whether vital or natural.

Alteratives. Medicines which gradually re-establish a healthy action in the system.

Amanrosis, or gutta serena. Dimness or loss of sight.

Amenorrhœa. An interruption of the menstrual discharge.

Anaphrodisia. Impotency.

Anasarca. Dropsy of the cellular membrane.

Anorexia. The third order of the class Locales: a loss of appetite.

Anthrax. An inflammatory tumour termed a carbuncle.

Antiphlogistic. The means adopted to allay inflammation.

Antispasmodics. Medicines which possess the power of allaying spasms.

Aperients. Medicines which mildly operate upon the bowels.

Aphthæ. The thrush.

Apocenoses. The fourth order of the class Locales, the character of which is unusual flux of blood or other humours, without pyrèsia, or increased impetus of the fluids.

Apoplexia. Apoplexy.

Apyrexia. Without fever.

Ascarides. Tape worm.

Ascites. Dropsy of the belly.

Asthma. A spasmodic affection of the lungs.

Atrophia. Atrophy; gradual wasting of the body.

C.

Cachexiæ. The third class of diseases of Cullen, the character of which is a depraved state of the whole or greater part of body, without any primary febrile or nervous affection.

Carditis. Inflammation of the heart.

Carminatives. Substances which lessen pain, and dispel flatulency in the primæ viæ.

Catalepsis. Catalepsy, a loss of sense and voluntary motion, without fever.

Catarrhus. A catarrh, or cold.

Cathartics. Medicines which promote an increase of the alvine evacuations.

Cephalalgia. Head-ache.

Chlorosis. Retention of the menses, called the green sickness.

Cholera Morbus. A purging and vomiting of bile.

Chorea. Saint Vitus's Dance.

Colica. The colic.

Coma. An inclination to sleep.

Comata. The first order of the class neuroses, the character of which is diminution of voluntary motion with sleep or a suspension of sense.

Coryza. Increased discharge of mucus from the nose.

Cynanche. Sore throat.

Cystitis. Inflammation of the bladder.

D.

Diabetes. An increased flow of urine.

Dialyses. The eighth order of the class Locales, the character of which is discontinuity of a part manifest to the sight or touch.

Diaphoretics. Substances which facilitate a determination to the skin.

Diaphragmatis. Inflammation of the diaphragm.

Diarrhœa. Frequent discharge of alvine matter from the bowels.

Dolorosi.	Painful affections.
Dysæsthesiæ.	The first order of the class Locales, the character of which is deprivation or loss of some sense frum the fault of the external origin.
Dyscinesiæ.	The third order of the class Locales: obstructed or depraved motions from fault in the organs.
Dyspnœa.	Difficult respiration without sense of stricture, accompanied with a cough.
Dysuria.	A frequent desire to make water, and difficulty in voiding it.
Dysenteria.	Dysentery or flux.
Dyspepsiæ.	Indigestion.
Dysorexiæ.	The second order of the class Locales: false or defective appetite.

E.

Emetics.	Substances which will excite the stomach to cast up its contents.
Emmenagogues.	Medicines which are supposed to have a specific action upon the uterine vessels.
Emollients.	Substances which possess the power of relaxing the living and animal fibre without any mechanical action.
Emphysema.	A collection of air in the cellular membrane.
Emphrosthonos.	A spasmodic action of the muscles which draws the body forward.

Empyema. A collection of pus in the thoracic cavity.

Eneuresis. Incontinency, or involuntary flow of urine.

Enteritis. Inflammation of the intestines.

Epidemic. A contagious disease prevailing at certain places and seasons.

Ephemera. A fever which commences and runs through its course in twelve hours.

Ephidrosis. An immoderate sweating.

Epilepsia. Epilepsy.

Epiphora. Involuntary flow of tears.

Epischeses. The fifth order of the class Locales: suppression of excretions.

Epistaxis. Hæmorrhage from the nose.

Errhines. Substances which excite sneezing, and increased secretion from the nose.

Erysipelas. Saint Anthony's fire.

Erythema. A morbid redness of the skin.

Exanthemata. The second order of the class Pyrexiæ: eruptive diseases.

Expectorants. Medicines which promote a secretion from the lungs.

F.

Febres. Fevers.

G.

Gangrene. Mortification.

Gastritis. Inflammation of the stomach.

Gastrodynia. Pain in the stomach.

Gonorrhœa. A genus of disease in the class *Locales* and other apocenoses of Cullen, who defines it a preternatural flux of fluid from the urethra in males, with or without libidinous desires.

H.

Hæmaturia. Bloody urine.

Hæmatemesis. A vomiting of blood.

Hæmoptysis. A spitting of blood.

Hæmorrhagia. The fourth order of the class Pyrexiæ; a flow of blood.

Hæmorrhois. The piles.

Hemiphlegia. Total paralysis of one side of the body.

Hepatitis. Inflammation of the liver.

Hydrocele. A collection of water in the tunica vaginalis testis.

Hydrocephalus. Water in the head.

Hydrometra. Dropsy of the uterus.

Hydrophobia. Canine madness.

Hydrothorax. A collection of water in the chest.

Hypochondriasis. Low spirits.

Hysteria. Hysterics.

Hysteritis. Inflammation of the uterus.

I.

Icterodes. A species of typhus resembling jaundice.

Icterus. The jaundice.

Impetigines. The third order of the class Cachexiæ: the character of which is a depraved habit, producing preternatural affections of the skin or external parts of the body.

Impetigo. Ringworm.

Influenza. An infectious catarrh.

Intumescentiæ. The second order of the class Cachexiæ: swelling of the whole or a great part of the body externally characterizes this order.

Ischuria. A total suppression of the urine.

Ischias. Or diseases of the hip joint.

L.

Leucorrhœa. (Fluor albus), or whites: a discharge of thin white or yellow matter from the uterus and vagina.

Lithiasis. Or the gravel and stone.

Lochia. The hæmorrhage or discharge which takes place after delivery.

Lumbricus. The long round worm.

M.

Mania. Madness.

Marcores. The first order of the class Cachexiæ: the character is emaciation of the whole body.

Meconium. A dark-coloured viscid matter in the bowels of infants at birth.

Melancholia. Melancholy madness.

Menorrhagia. An increased flux of the menses.

Miliaria. Miliary fever.

N.

Narcotics. Substances which promote sleep and ease pain.

Nephbalgia. Pain in the kidney.

Nephritis. Inflammation of the kidney.

Nephritics. Medicines used in diseases of the kidney.

Neuralgia Facialis. A painful affection of the nerves of the face.

Neuroses. The second class of diseases; the character assigned to which is preternatural affection of sense and motion, without idiopathic or primary pyrexia, and without local disease.

Nosology. The doctrine of the names of diseases.

O.

Obesitas. Corpulence.

Obstipatio. Costiveness.

Œdema. Anasarcous swelling.

Odontalgia. Tooth-ach.

Odontrasis. Dentition, or cutting teeth.

Ophthalmia. Inflammation of the eye.

Opiate. A medicine which procures sleep

Opisthotonos. Spasm of the muscles, drawing the body backwards, accompanying tetanus.

Otitis. Inflammation of the ear.

P.

Paracusis. Deafness, or depraved hearing.

Paralysis. The palsy.

Paraphymosis. A swelling and contraction of the prepuce behind the glans penis, so that it cannot be drawn forward.

Paraplegia. In *paralysis*; when there is a loss of feeling and motion in half of the body, taken transversely, it is so termed.

Pemphigus. Vesicular eruption.

Peripneumonia. Inflammation of the lungs.

Peritonitis. Inflammation of the peritonæum.

Pertussis. The hooping cough.

Pestis. The plague.

Phlegmasiæ. The second order of the class pyrexiæ: inflammations. The character of this order is synochal fever, with inflammation or topical pain; the function of an internal part being affected; the blood exhibiting a buffy coat.

Phrenitis. Inflammation of the brain, or its membranes.

Phthisis-Pulmonalis, or Pulmonary consumption.

PHYMOSIS. An enlarged state of the foreskin, it being contracted over the end of the penis, so that it cannot be drawn back over the glans penis.

PLEURITIS. Inflammation of the pleura.

PNEUMONIA. Inflammation of the lungs.

PODAGRA. Gout.

POLYSARCHIA. Corpulence.

PORRIGO, or tinea. Scalded head.

PROFLUVIA. The fifth order of the class pyrexiæ: the character of which is pyrexia with an increased excretion, not naturally bloody. *(Fluxes.)*

PROGNOSIS. The art of judging of the result of diseases by the symptoms.

PSORA. The itch.

PTYYALISMUS. Ptyalism, or salivation.

PYREXIÆ. The first class of diseases; the character of which is increased heat, and frequency of the pulse, after a shivering, accompanied with a disturbance in many of the functions, and diminution of strength, particularly in the limbs.

PYROSIS. Water-Bash.

Q.

QUERTAN. A fourth day ague.

QUOTIDIAN. Every day ague.

R.

RABIES, or hydrophobia. Canine madness.

Rachitis. The rickets.

Rheumatismus. The rheumatism.

Risus Sardonicus. Sardonic laugh.

Rubefacients. Substances which will produce a redness of the skin without blistering.

Rubeola. The measles.

S.

Scarlatina. The scarlet fever.

Scirrhus. A hard and indolent humour.

Scorbutus. Scurvy.

Scrofula. The king's evil.

Sedatives. Medicines which diminish animal energy.

Septic. Relating to putrefaction.

Sialogogues. Substances which increase the secretion of saliva.

Sphacelas. Actual mortification.

Spasmi. The third order of the class Neuroses, spasmodic diseases: the character of this order is irregular or preternatural motions of the muscles, or muscular fibres.

Splenitis. Inflammation of the spleen.

Stimulants. Medicines which excite the animal energy.

Stomachics. Medicines which improve the action and tone of the stomach.

Strabismus. Squinting.

Styptics. Substances which will stop hæmorrhagies.

Sudorifics. Medicines or substances which promote perspiration.

Sublimation. An evaporation of solid substances.

Subsultus. An involuntary motion of the tendons.

Suppuration. The action by which pus is secreted in inflamatory tumours.

Syncope. A fainting.

Synocha. Inflammatory fever.

Synochus. Mixed fever.

Syphilis. The venereal disease.

Systole. The contraction of the heart.

T.

Tænia. The tape worm.

Tertian. A third day ague.

Tenesmus. A frequent inclination to go to stool, without any evacuation of fæces.

Teres. Round worm.

Tetanus. The cramp, or rigid spasm.

Tic Douloureux. Painful affection of the nerves of the face.

Tinea, or porrigo. Scalded head.

Tonics. Medicines which improve the tone of the muscular fibre.

Trismus. Locked jaw.

Tumores. Tumours; the sixth order of the class

Locales; character, an increased size of a part, with little or no inflammation.

Typhus. A species of continued fever.

Tmpanites. Tympany, or drum belly; a violent distension of the intestines, or cavity of the abdomen, by wind.

U.

Ulcus. An ulcer or sore.

Urticaria. Nettle rash.

V.

Varicella. The chicken pox.

Variola. The small pox.

Variolæ. Vaccinæ: the cow pox.

Varix. A dilatation of a vein.

Vermes. Worms.

Vertigo. Giddiness in the head.

Vesaniæ. The fourth order of the class Neuroses: the character, of which is impaired judgment without pyrexia or coma.

A

SYSTEMATIC

ARRANGEMEMT OF DISEASES,

With few Exceptions (as in italics), agreeable to Dr. Cullen.

CLASS I.

PYREXIÆ. (FEBRILE DISEASES.)

ORDER 1.

FERRES. (FEVERS.)

Genera 6.

a. (Intermittent fevers.)

Tertiana, ... every third day ague.
Quartana, ... fourth day ague.
Quotidiana, every day ague.

a. (Continued fevers.)

Synocha,...... inflammatory fever.
Typhus, ... nervous fever.
Synochus, ... mixed fever.

ORDER 2.

PHLEGMASIÆ. (INFLAMMATIONS.)

Genera 23.

Phlogosis,	inflammation.
Phrenitis, or inflammation of the	brain.
Ophthalmia,	eye.
Otitis,	*ear.*
Glossitis,	*tongue.*
Cynanche,	throat.
Pleuritis,	*pleura.*
Pneumonia,	lung.
Carditis,	heart.
Diaphragmitis,	*disphragm.*
Hepatitis,	liver.
Gastritis,	stomach.
Enteritis,	bowel.
Splenitis,	spleen.
Nephritis,	kidney.
Cystitis,	bladder.
Hysteritis,	uterus.
Arthropuosis,	*of a joint.*
Prostitis,	*prostrate gland.*
Peritonitis,	*peritoneum.*
Podagra,	the gout.
Rheumatismus,	rheumatism.
Odontalgia,	tooth ache.

ORDER 3.

EXANTHEMATA. (ERUPTIVE FEVERS.)

Genera 10.

Variola,	small pox.
Varicella,	chicken pox.
Rubeola,	measles.
Scarlatina,	scarlet fever.
Pestis,	plague.
Erysipelas,	Saint Anthony's fire.
Miliaria,	miliary fever.
Urticaria,	nettle rash.
Pemphigus,	vesicular fever.
Aphtha,	aphthous fever.

ORDER 4.

HÆMORRHAGIÆ. (HÆMORRHAGES.)

Genera 6.

Epistaxis,	bleeding from the nose.
Hæmoptysis,	spitting or coughing blood.
Hæmorrhois,	piles.
Menorrhagia,	flooding.
Hæmaturia,	*voiding of blood by urine.*
Hæmatemesis,	*vomiting of blood.*

ORDER 5.

PROFLUVIA. (FLUXES.)

Genera 2.

Catarrhus,	catarrh, or cold.
Dysenteria,	dysentery.

CLASS II.

NEUROSES. (Nerrvous Diseases.)

Order 1.

Comata. (Soporose Diseases.)

Genera 2.

Apoplexia, or ...... apoplexy.
Paralysis, ... palsy.

Order 2.

Adynamiæ. (Defect of Vital Powers.)

Genera 5.

Syncope, or fainting.
Vertigo, ... giddiness.
Dyspepsia, indigestion.
Hypochondriasis (hypochondriac affections).
Chlorosis,......... retention of the menses, or green sickness.

Order 3.

Spasmi. (Spasmodic Diseases.)

Genera 17.

Tetanus,............... cramp or rigid spasm.
Trismus,.............. locked jaw.
Convulsio, ... convulsions.
Chorea, ... St. Vitus' Dance.

Raphania,	raphany.
Epilepsia,	epilepsy.
Palpitatio,	palpitation of the heart.
Asthma,	asthma.
Dyspnœa,	difficulty of breathing.
Pertussis,	hooping cough.
Pyrosis,	water brash.
Colica,	colic.
Cholera,	cholera, or vomiting and purging.
Diarrhœa,	purging.
Hysteria,	hysteric diseases.
Hydrophobia,	canine madness.
Diabetes,	excessive discharge of urine.

ORDER 4.

VESANIÆ. (MENTAL DISEASES.)

Genera 4.

Amentia,	fatuity.
Melancholia,	melancholy.
Mania,	madness.
Oneirodynia,	disturbed sleep.

CLASS III.

CACHEXIÆ. (CACHETIC DISEASES.)

ORDER 1.

MARCORES. (UNIVERSAL EMACIATION.)

Genera 3.

Tabes,	a wasting away, with hectic fever.

Atrophia,	nervous consumption.
Phthisis,	*pulmonary consumption.*

ORDER 2.

INTUMESCENTIÆ. (GENERAL SWELLINGS.)

Genera 13.

a. Adipose Swellings 1.

Polysarcia,	corpulency, or obesity.

a. Flatulent Swellings. 3.

Pneumatosis,	windy swellings.
Tympanites,	tympany, or drum belly.
Physometra,	a windy swelling of the uterus.

a. Dropsies. 7.

Anasarca,	dropsy of the cellular membrane.
Hydrocephalus,	dropsy in the head.
Hydrorachitis,	water in the spine.
Hydrothorax,	dropsy in the chest.
Acites,	dropsy of the belly.
Hydrometra,	dropsy of the uterus.
Hydrocele,	dropsy of the tunica vaginalis testis.

a. 4 *Swellings of the Solids.* 2.

Physconia,	enlargement of the abdomen.
Rachitis,	rickets.

ORDER 3.

IMPETIGINES. (CUTANEOUS DISEASE.)

Genera 8.

Scrophula,	Scrofula, or king's evil.
Syphilis,	venereal disease.
Scorbutus,	scurvy.
Elephantiasis,	elephant-like eruption.
Lepra,	leprosy.
Frambæsia,	yaws, or raspberry-like eruption.
Trichoma,	trichoma, or plaited hair.
Icterus,	jaundice.

CLASS IV.

LOCALES. (LOCAL DISEASES.)

ORDER 1.

DYSÆSTHESIÆ. (Diseases of the senses.)

Genera 9.

Caligo,	a disease of the eye.
Amaurosis,	gutta serena.
Dysopia,	difficult sight.
Pseudoblepsis,	an imaginary, or depraved vision of objects.
Dysecoea,	difficulty of hearing, or deafness.
Paracusis,	depraved hearing.
Anosmia,	a loss of the sense of smelling.
Aghenstia,	a defect, or loss of taste.
Anæsthesia,	loss of the sense of touch.

Order 2.

Dysorexiæ. (Depraved appetites.)

Genera 9.

Bulimia,	canine, or insatiable appetite.
Polydipsia,	excessive thirst.
Pica,	depraved appetite, or a longing for unnatural food.
Satyriasis,	excessive desire for coition in men.
Nymphomania,	excessive desire for coition in women.
Nostalgia,	a vehement desire to return to one's native home.

Defective appetite.

Anorexia,	a want of appetite without a disgust of food.
Adipsia,	a want of thirst.
Anaphrodisia,	impotence.

Order 3.

Dyscinesiæ. (Motion impeded or depraved from an imperfection of the organ.)

Genera 7.

Aphonia,	a suppression of the voice without syncope or coma.
Mutitas,	an inability of articulation or dumbness.

Paraphonia, ...	alteration of the voice.
Psellismus, ...	defect or hesitation of speech.
Strabismus, ...	squinting.
Dysphagia, ...	a difficulty of deglutition.
Contractura, ...	a rigid contraction of the muscles or joints.

ORDER 4.

APOCENOSES. (Increased discharge.)

Genera 6.

Profusio, ...	a passive loss of blood.
Ephidrosis, ...	a violent and morbid perspiration.
Epiphora, ...	the watery eye, or involuntary flow of tears.
Ptyalismus, ...	ptyalism, salivation or increased secretion of saliva from the mouth.
Enuresis, ...	an incontinency or involuntary flow of urine.
Gonorrhœa, ...	a preternatural flux of fluid from the urethra.

ORDER 5.

EPISCHESES. (Obstructions.)

Genera 5.

Obstipatio, ...	costiveness.
Ischuria, ...	a suppression of urine.
Dysuria, ...	*(ardor urinæ)*, a suppression, or

	difficulty and pain in discharging the urine.
Dyspermatismus,	a slow or impeded emission of semen, during coition.
Amenorrhœa,......	a partial or total obstruction of the menses, from other causes than pregnancy or old age.

ORDER 6.

TUMORES. (Tumours.)

Genera 13.

Aneurisma,.........	an aneurism, or preternatural dilatation of an artery, forming a tumour.
Varix,...............	a dilatation of a vein.
Ecchymoma, ...	extravasation.
Schirrus, ...	hard indolent tumour.
Cancer, ...	a painful scirrhous tumour, terminating in a fatal ulcer.
Bubo, ...	a swelling of the lymphatic glands, particularly of the groin and axilla.
Sarcoma, ...	a fleshy excrescence.
Clavus, ...	corns.
Lupia,...............	encysted tumour.
Ganglion, ...	an encysted tumour, formed in the sheath of a tendon.

Hydatis,	animals formed like a bladder distended with aqueous fluid, found in the cavities of the body and viscera.
Hydarthrus,	the white swelling.
Exostosis,	A morbid enlargement, or hard tumour of a bone.

ORDER 7.

ECTOPIÆ. (Parts displaced.)

Genera 3.

Hernia,	a rupture.
Prolapsus,	a protrusion or falling down of a part that is uncovered.
Luxatio,	dislocation.

ORDER 8.

DYALYSES.

Genera 7.

Vulnus,	a wound.
Ulcus,	an ulcer or sore.
Herpes,	tetters, or cutaneous ulcers.
Tinea,	the scalled head.
Psora,	the itch.
Fractura,	a fracture.
Caries,	a rottenness or mortification of the bones.

MATERIA MEDICA.

IN the second column, *Vegetables* are arranged according to Willdenow's Edition of the *Spec. Plant. of Linnæus;* animals according to Gmelin's Edition of the *Syst. Naturæ Linnæi;* and chemical articles are designated by the most modern appellations, unless where otherwise specified: the virtues and proper doses are affixed to each article.

ABIETIS Resina	Pinus Abies	*Resin of the Spruce Fir*		
Absinthium	*Artemisia* Absinthium	*Common Wormwood*	Tonic, anthelmintic	℈j. to ʒj.
Acaciæ Gummi	Acacia vera	*Acacia Gum*	Demulcent	ʒss. to ʒij.
Acetosæ Folia	Rumex Acetosa	*Leaves of Sorrel*	Refrigerant, diuretic	....
Acetosella	Oxalis Acetosella	*Woodsorrel*	Refrigerant, antiseptic	....
Acetum	Acidum aceticum impurum	*Vinegar*	Antiseptic, antinarcotic, refrigerant	fʒj. to f℥ss.
Acidum sulphuricum	Acidum sulphuricum	*Sulphuric Acid*	See *Acid : sulph : d.*	....
Aconiti Folia	Aconitum Napellus	*Leaves of Monk's Hood*	Narcotic, sudorific deobstruent	gr. j. to v.
Adeps	Sus Scrofa	*Hog's Lard*	... .	....
Ærugo	Subacetas Cupri impura	*Verdigris*	Tonic, emetic	gr. ⅛ to gr. j.
Allii Radix	Allium sativum	*Root of Garlic*	Diuretic, expectorant, stimulant	gr. x. to ʒj.

Aloës spicatæ Extractum	Aloë spicata	*Extract of spiked Aloës*	Warm stimulating cathartic, anthelmintic	gr. v. to xv.
Aloës vulgaris Extractum	Aloë vulgaris	*Extract of common Aloës*	The same	gr. v. to xv.
Althææ Folia et Radix	Althæa officinalis	*Leaves and Root of Marshmallows*	Emollient, demulcent	See Syrup:
Alumen	Supersulphas Aluminæ et Potassæ	*Alum*	Astringent, tonic	gr. v. to ℈j.
Ammoniacum	Heracleum Gummiferum	*Gum Ammoniac*	Expectorant, antispasmodic	gr. x. to ʒss.
Ammoniæ Murias	Murias Ammoniæ	*Muriate of Ammonia*	Diuretic, aperient	gr. x. to ʒss.
Amygdalæ amaræ	Amygdalus communis, Var.	*Bitter Almonds*	Narcotic, demulcent	....
Amygdalæ dulces	*The Kernels*	*Sweet Almonds*	Demulcent	....
Amylum	Triticum Hybernum	*Starch*	Demulcent	....
Anethi Semina	Anethum graveolens	*Dill Seeds*	Carminative	gr. x. to ʒj.
Anisi Semina	Pimpinella Anisum	*Anise Seeds*	Carminative, stimulant	gr. x. to ʒj.
Anthemidis Flores	Anthemis nobilis	*Flowers of Chamomile*	Tonic, stomachic	gr. x. to ʒj.
Antimonii Sulphuretum	Sulphuretum Antimonii	*Sulphuret of Antimony*	Alterative, diaphoretic	gr. x. to ʒss.
Argentum	Argentum purificatum	*Silver*	....	....
Armoraciæ Radix	Cochlearia Armoracia	*Root of Horseradish*	Antiscorbutic, stimulant, diuretic	℈j. to ʒj.

Arsenici Oxydum	Oxydum Arsenici album	*Oxyde of Arsenic*	See preparations	
Asari Folia	Asarum Europæum	*Leaves of Asarabacca*	Emetic, cathartic, used as an errhine	gr. x. to ℈j.
Assafœtidæ Gummi-Resina	Ferula Assafœtida	*Gum Resin of Assafœtida*	Antispasmodic, stimulant, expectorant	gr. v. to ʒss.
Avenæ Semina	Avena sativa	*Oats*	Nutritive, emollient	*ad libitum.*
Aurantii Baccæ	Citrus Aurantium (Hispalense)	*Seville Orange-berries*	Refrigerant, antiseptic	…………
Aurantii Cortex	The outer *Rind of the Berries*	*Orange Rind*	Tonic, carminative	…………
BALSAMUM Peruvianum	Myroxylon Peruiferum	*Peruvian Balsam*	Stimulant, tonic, expectorant	gr. v. to ʒss.
Balsamum Tolutanum	Toluifera Balsamum	*Balsam of Tolu*	Expectorant, stimulant	gr. x. to ʒss.
Belladonnæ Folia	Atropa Belladonna	*Leaves of the Deadly Nightshade*	Narcotic, antispasmodic	gr. ss. to gr. iv.
Benzöinum	Styrax Benzöin	*Benzöin*	Expectorant, stimulant	gr. x. to ʒss.
Bistortæ Radix	Polygonum Bistorta	*Bistort Root*	Astringent, tonic	gr. x. to ʒss.
CAJUPUTI Oleum	Melaleuca Cajuputi	*Cajuput Oil*	Stimulant, antispasmodic, diaphoretic	♏j. to ♏v.

Calamina	Carbonas Zinci impura	*Calamine*	………………	… …. …
Calami Radix	Acorus Calamus	*Root of the Sweet Flag*	Tonic, stomachic	gr. x. to ʒj.
Calumbæ Radix	*Plant not yet named*	*Calumba Root*	Tonic, stomachic	gr. x. to ℈j.
Cambogia	Stalagmitis Cambogiöides	*Gamboge*	Cathartic, hydragogue	gr. ij. to xij.
Camphora	Laurus Camphora	*Camphor*	Sudorific, antispasmodic, sedative	gr. iij. to ℈j.
Canellæ Cortex	Canella alba	*Canella Bark*	Cordial. aromatic	gr. x. to ʒss.
Capsici Baccæ	Capsicum annuum	*Berries of Capsicum (Cayenne Pepper)*	Stomachic, stimulant	gr. v. to x.
Carbo Ligni	Carbo Ligni recens	*Charcoal*	Antiseptic	gr. x. to ℈j.
Cardamines Flores	Cardamine pratensis	*Cuckoo-flower*	Stimulant, antispasmodic	℈j. to ʒj.
Cardamomi Semina	Elettaria Cardamomum	*Seeds of Cardamom*	Stomachic, carminative	gr. v. to ʒss.
Caricæ Fructus	Ficus Carica	*Figs*	………………	…………
Carui Semina	Carum Carui	*Carraway Seeds*	Carminative	gr. x. to ʒj.
Caryophilli	Eugenia caryophillata	*Cloves*	Aromatic, stomachic	gr. v. to ℈j.
Caryophillorum Oleum	*Their essential Oil*	*Oil of Cloves*	Stimulant	♏j. to ♏v.
Cascarillæ Cortex	Croton Cascarilla	*Cascarilla Bark*	Tonic, stomachic	gr. x. to ʒj.
Cassiæ Pulpa	Cassia Fistula	*Cassia Pulp*	Laxative	℥ss. to ℥j.

Castoreum	Castor Fiber (Rossicus)	*Castor*	Antispasmodic	gr. v. to ℈j.
Catechu Extractum	Acacia Catechu	*Extract of Catechu*	Astringent	gr. x. to ℈j.
Centaurii Cacumina	Chironia Centaurium	*Tops of Centaury*	Tonic, stomachic	gr. xv. to ʒj.
Cera alba	....	*White Wax*	....	....
Cera flava	....	*Yellow Wax*	....	....
Cerevisiæ fermentum	....	*Yeast*	....	....
Cetaceum	Physeter macrocephalus	*Spermaceti*	Demulcent, emollient	℈j. to ʒij.
Cinchonæ cordifoliæ Cortex	Cinchona cordifolia	*Bark of hart-leaved Cinchona, yellow bark*	Tonic, febrifuge	gr. x. to ʒij.
Cinchona lancifoliæ Cortex	Cinchona lancifolia	*Bark of lance-leaved Cinchona, or pale bark*	Tonic, febrifuge	gr. x. to ʒij.
Cinchonæ oblongifoliæ Cortex	Cinchona oblongifolia	*Bark of oblong-leaved Cinchona, or red bark*	Tonic, febrifuge	gr. x. to ʒij.
Cinnamomi Cortex	Laurus Cinnamomum	*Bark of Cinnamon*	Aromatic, stomachic	gr. x. to ℈j.
Cinnamomi Oleum	*Its essential Oil*	*Oil of Cinnamon*	Stimulant, antispasmodic, stomachic	♏j. to ♏iij
Coccus	Coccus Cacti	*Cochineal*	....	
Colchici Radix	Colchicum Autumnale	*Root of Meadow Saffron*	Diuretic, narcotic, cathartic	gr. ss. to gr. v.
Colocynthidis Pulpa	Cucumis Colocynthis	*Pulp of the Bitter Apple*	Cathartic	See Extract
Conii Folia	Conium maculatum	*Leaves of Hemlock*	Narcotic	gr. ij. to ℈j.

Contrajervæ Radix	Dorstenia Contrajerva	*Root of Contrayerva*	Tonic, diaphoretic, stimulant	gr. x. to ʒss.
Copaiba	Copaifera officinalis	*Copaiva*	Diuretic, stimulant	℈j. to ʒj.
Coriandri Semina	Coriandrum Sativum	*Coriander Seeds*	Carminative	℈j. to ʒiss.
Cornua	Cervus Elaphus	*Horns (of the Stag)*	Nutritive, emollient	....
Creta	Carbonas Calcis friabilis	*Chalk*	Absorbent	ʒss. to ʒij.
Croci Stigmata	Crocus Sativus (Anglicus)	*Saffron*	Cordial, diaphoretic	gr. v. to ʒss.
Cumini Semina	Cuminum Cyminum	*Cummin Seeds*	Stimulant, antispasmodic	℈j. to ʒj.
Cupri Sulphas	Sulphas Cupri	*Sulphate of Copper*	Tonic, astringent, or emetic	gr. ¼. to gr. j. gr. ij. to gr. x.
Cuspariæ Cortex	Cusparia Febrifuga	*Cusparia Bark*	Tonic, stomachic	gr. v. to xx.
Cydoniæ Semina	Pyrus Cydonia	*Quince Seeds*	See Dec: Cydon.	....
DAUCI Radix	Daucus Carota (hortensis)	*Carrot Root*	....	....
Dauci Semina	Daucus Carota (agrestis)	*Wild Carrot Seeds*	Diuretic, stimulant	℈j. to ʒj.
Digitalis Folia	Digitalis Purpurea	*Leaves of purple Foxglove*	Narcotic, diuretic, sedative	gr. ss. to gr. iij.
Dolichi Pubes	Dolichos pruriens	*Cowhage*	Anthelmintic	gr. v. to gr. x.
Dulcamaræ Caulis	Solanum Dulcamara	*Stalk of Bittersweet, or Woody Nightshade*	Diuretic, diaphoretic	gr. x. to ʒj.

ELATERII Poma	Momordica Elaterium	*Fruit of the wild Cucumber*	Violently cathartic	gr. ij. to gr. iij.
Elemi	Amyris Elemifera	*Elemi*	Acrid, stimulant	gr. x. to ʒss.
Euphorbiæ Gummi-resina	Euphorbia officinarum	*The Gum-resin of Euphorbium*	Used as an errhine	…………
FŒNICULI Semina	Anethum Fœniculum	*Seeds of Fennel*	Stimulant, carminative, diuretic	℈j. to ʒj
Farina	Triticum Hybernum	*Flour*	………………	…………
Ferrum	Ferri Ramenta et Fila	*Iron*	Tonic, anthelmintic of the iron filings	v. to xx.
Filicis Radix	Aspidium Filix mas	*Root af the Male Fern*	Anthelmintic	ʒj. to ʒiij.
Fucus	Fucus vesiculosus	*Sea-wrack, ar Bladder Fucus*	(Burnt and powdered) deobstruent	℈j. to ʒj.
GALBANI Gummi-resina	Bubon Galbanum	*Gum-resin of Galbanum*	Antispasmodic, expectorant	gr. x. to ʒj.
Gallæ	Cynips Quercûs folii	*Gall-nut*	Astringent, tonic	gr. v. to ℈j.
Gentianæ Radix	Gentiana Lutea	*Root of Gentian*	Tonic, stomachic	gr. x. to ʒj.
Glycyrrhizæ Radix	Glycyrrhiza glabra	*Root of Liquorice*	Demulcent	ʒss. to ʒj.
Granati Cortex	Punica Granatum	*Bark of the Pomegranate*	Astringent	℈j. to ʒj.
Guaiaci Resina et Lignum	Guaiacum officinale	*Resin and Wood of Guaiacum*	Sudorific, stimulant, or purgative	gr. v. to ʒss. xv. to ℈ij.

HÆMATOXYLI Lignum	Hæmatoxylon Campechianum	*Logwood*	Astringent, tonic	℈j. to ʒj.
Hellebori fœtidi folia	Helleborus fœtidus	*Leaves of stinking Hellebore*	Cathartic, anthelmintic	gr. x. to ʒss.
Hordei Semina	Hordeum distichon	*Pearl Barley*	....	....
Humuli Strobili	Humulus Lupulus	*Hops*	Anodyne, diuretic	gr. x to ℈j.
Hydrargyrum	....	*Quicksilver*	....	....
Hyoscyami Folia	Hyoscyamus niger	*Leaves of Henbane*	Narcotic, diaphoretic	gr. ij. to gr. x.
JALAPÆ Radix	Convolvulus Jalapa	*Root of Jalap*	Cathartic	gr. x. to ʒss.
Ipecacuanhæ Radix	Collicocca Ipecacuanha	*Root of Ipecacuanha*	Diaphoretic, expectorant, emetic	gr. ss. to gr. ij. et gr. v. to ʒss.
Juniperi Baccæ et Cacumina	Juniperus communis	*Juniper Berries & Tops*	Diuretic, stimulant carminative	ʒss. to ʒj.
KINO	*Extract of an African tree not yet described.*	*Kino*	Astringent	gr. x. to xx.
LAPIS Calcareus	Carbonas Calcis dura	*Lime-stone*	....	....
Lavandulæ Flores	Lavandula Spica	*Flowers of Lavender*	Stimulant, aromatic	℈j. to ʒj.
Lauri Baccæ et Folia	Laurus Nobilis	*Berries and Leaves of the Bay tree*	Stimulant, narcotic	gr. x. to ʒss.
Lichen	Lichen Islandicus	*Liverwort*	Tonic, demulcent	℈j. to ʒj.
Limones	Citrus Medica	*Lemons*	Refrigerant, antiseptic	f℥ij.

Limonum Cortex	*The exterior rind*	*Rind of Lemons*	....	....
Limonum Oleum	*The essential Oil of the outer rind*	*Oil of Lemons*	....	....
Linum catharticum	Linum catharticum	*Purging Flax*	Cathartic	℈j. to ʒj.
Lini usitatissimi semina	Linum usitatissima	*Common Linseed*	Demulcent	*ad libitum*
Lytta	Lytta vesicatoria	*Blistering Fly*	Stimulant, diuretic	gr. $\frac{1}{4}$. to gr. iij.
MAGNESIÆ Sulphas	....	*Sulphate of Magnesia*	Cathartic	ʒij. to ℥j.
Malva	Malva sylvestris	*Common Mallow*	Demulcent	ʒss. to ʒj.
Manna	Fraxinus Ornus	*Manna*	Laxative	ʒss. to ℥ij.
Marrubium	Marrubium vulgare	*White Horehound*	Emmenagogue, cathartic	gr. xv. to ℈ij.
Mastiche	Pistacia Lentiscus	*Mastich*	Stimulant, sialogogue	gr. x. to ʒss.
Mel	....	*Honey*	....	....
Mentha piperita	Mentha piperita	*Peppermint*	Stomachic, stimulant	gr. x. to ʒj.
Mentha viridis	Mentha viridis	*Spearmint*	Stomachic, stimulant	gr. x. to ʒj.
Menyanthes	Menyanthes trifoliata	*Buckbean*	Cathartic, tonic	ʒss. to ʒj.
Mezerei Cortex	Daphne Mezereum	*Bark of Mezereon*	Stimulant, deobstruent, diaphoretic	gr. j. to gr. x.
Mori Baccæ	Morus nigra	*Mulberries*	Cooling, laxative	....
Moschus	Moschus moschiferus	*Musk*	Stimulant, antispasmodic	gr. ij. to ℈j.
Myristicæ Nuclei	Myristica moschata	*Nutmegs*	Aromatic, stimulant	gr. v. to ℈j.

Myrrha	*The Gum-resin of a tree not yet described*	*Myrrh*	Stimulant, expectorant	gr. x. to ʒj.
OLIBANUM	Juniperus Lycia	*Olibanum*	Stimulant	gr. x. to ʒss.
Olivæ Oleum	Olea Europæa	*Oil of Olive*	Demulcent, emollient	fʒss. to f℥j.
Opium	Papaver Somniferum	*Opium*	Narcotic, anodyne, sedative	gr. j. to gr. v. ....
			Stimulant	gr. ¼ to gr. ss.
Opoponacis Gummi-resina	Pastinaca Opoponax	*Gum-resin of Opoponax*	Emmenagogue, stimulant	gr. x. to ʒss.
Origanum	Origanum vulgare	*Common Marjoram*	Aromatic, stimulant	gr. v. to ℈j.
Ovum	Phasianus Gallus	*An Egg*	Nutritive	....
PAPAVERIS Capsulæ	Papaver somniferum	*Capsules of the White Poppy*	....	....
Petroleum	....	*Petroleum*	Antispasmodic, sudorific	♏x. to fʒss.
Pimentæ Baccæ	Myrtus Pimenta	*Pimenta Berries*	Aromatic, stimulant	gr. v. to ℈j.
Piperis longi Fructus	Piper longum	*Fruit of Long Pepper*	Aromatic, stimulant	gr. v. to ℈j.
Piperis nigris Baccæ	Piper nigrum	*Black Pepper Berries*	Aromatic, stimulant	gr. v. to ℈j.
Pix arida	Pinus Abies	*Burgundy Pitch*	....	....
Pix liquida	Pinus Sylvestris	*Tar*	Stimulant, diuretic, sudorific	....
Plumbi Subcarbonas	Subcarbonas Plumbi	*Subcarbonate of Lead*	....	... .
Plumbi Oxydum semivitrium	....	*Semi-vitrified Oxyde of Lead*	....	....

Porri Radix	Allium Porrum	*Root of the Leek (the juice)*	Expectorant, diuretic	fʒj. to f℥ss.
Potassæ Nitras	Nitras Potassæ purificata	*Nitrate of Potass*	Diaphoretic, diuretic refrigerant	gr. x. to ʒss.
Potassæ Supertartras	Supertartras Potassæ purificata	*Supertartrate of Potass*	Cooling, cathartic	ʒj. to ʒiij.
Potassa impura	Subcarbonas Potassæ impura	*Impure Potass*	………………	…………
Pruna	Prunus domestica	*The Prune*	………………	…………
Pterocarpi Lignum	Pterocarpus santalinus	*Red Saunders Wood*	………………	…………
Pulegium	Mentha Pulegium	*Pennyroyal*	Aromatic, stimulant	gr. x. to ʒj.
Pyrethri Radix	Anthemis Pyrethrum	*Root of the Pellitory of Spain*	Sialogogue, stimulant	gr. v. to gr. xv.
QUASSIÆ Lignum	Quassia excelsa	*Quassia Wood*	Tonic, stomachic	gr. v. to ʒss.
Quercûs Cortex	Quercûs pedunculata	*Bark of the Oak*	Astringent, tonic	gr. x. to ʒss.
RESINA flava	Pinus Sylvestris	*Yellow Resin*	………………	…………
Resina nigra	Pinus Sylvestris	*Black Resin*	………………	…………
Rhamni Baccæ	Rhamnus Catharticus	*Buckthorn Berries*	Cathartic	ʒj. to ʒij.
Rhei Radix	Rheum Palmatum	*Root of Rhubarb*	Cathartic, stomachic astringent	gr. x. to ʒss.
Rhœados Petala	Papaver Rhœas	*Petals of the Red Poppy*	………………	…………
Ricini Oleum	Ricinus communis	*Castor Oil*	Cathartic	fʒij. to f℥j.

Rosæ Caninæ pulpa	Rosa canina	*Pulp of the Dog-rose (the Hip)*	Cooling	ʒj. to ℥j.
Rosæ centifoliæ Petala	Rosa centifolia	*Petals of the Damask Rose*	Laxative	℈j. to ʒj.
Rosæ Gallicæ Petala	Rosa Gallica	*Petals of the Red Rose*	Astringent, tonic	℈j. to ʒj.
Rosmarini cacumina	Rosmarinus Officinalis	*Tops of Rosemary*	Emmenagogue, tonic, stimulant	gr. x. to ʒss.
Rubiæ Radix	Rubia Tinctorum	*Madder Root*	Astringent, emmenagogue	gr. xv. to ℈j.
Rutæ Folia	Ruta graveolens	*Leaves of Rue*	Emmenagogue, antispasmodic, stimulant	gr. xv. to ℈ij.
SABINÆ Folia	Juniperus Sabina	*Leaves of Savine*	Emmenagogue, stimulant, anthelmintic	gr. v. to x.
Saccharum	Saccharum Officinale	*Sugar*	....	....
Saccharum purificatum		*Refined Sugar*	....	....
Sagapenum	*The Gum-resin of a plant not yet described*	*Sagapenum*	Emmenagogue, antispasmodic	gr. x. to ʒss.
Salicis Cortex	Salix Caprea	*Bark of the Willow*	Tonic, astringent	gr. xv. to ʒj.
Sambuci Flores	Sambucus Nigra	*Flowers of Elder*	....	....
Sapo durus	*Soap made from Oil of Olives and Soda*	*Hard Soap*	Cathartic, diuretic	gr. x. to ʒss.

Sapo mollis	....	*Soft Soap*	....	....
Sarsaparillæ Radix	Smilax Sarsaparilla	*Root of Sarsaparilla*	Diaphoretic, alterative	℈j. to ʒj.
Sassafras Lignum et Radix	Laurus Sassafras	*Wood and Root of Sassafras*	Diaphoretic, stimulant, diuretic	℈j. to ʒj.
Scammoneæ Gummi-resina	Convolvolus Scammonea	*Gum-resin of Scammony*	Cathartic	gr. iv. to ℈j.
Scillæ Radix	Scilla Maritima	*Root of the Squill*	Expectorant, diuretic, emetic in large doses	(*fresh*) gr. v. to x. (*dried*) gr. j. to gr. iij.
Senegæ Radix	Polygala Senega	*Root of Senaga*	Diaphoretic, expectorant, stimulant	℈j. to ℈ij.
Sennæ Foliæ	Cassia Senna	*Leaves of Senna*	Cathartic	℈j. to ʒj.
Serpentaria Radix	Aristolochia Serpentaria	*Serpentary or Snakeroot*	Diaphoretic, stimulant	gr. x. to ʒss.
Sevum	Ovis Aries	*(Mutton) Suet*	....	....
Simaroubæ Cortex	Quassia Simarouba	*Simarouba Bark*	Tonic, astringent	gr. x. to ʒj.
Sinapis Semina	Sinapis Nigra	*Mustard Seeds*	Stimulant, diuretic	ʒss. to ʒj.
Sodæ Murias	Murias Sodæ	*Muriate of Soda*	Tonic, purgative	gr. x. to ʒss.
Sodæ Sub-boras	Sub-boras Sodæ	*Sub-borate of Soda*	Diuretic, emmenagogue	gr. x. to ʒss.
Sodæ Sulphas	Sulphas Sodæ	*Sulphate of Soda*	Cathartic	ʒj. to ℥j.
Soda impura	Subcarbonas Sodæ impura	*Impure Soda*	....	....
Spartii Cacumina	Spartium Scoparium	*Broom Tops*	Cathartic, diuretic	℈j. to ʒj.

Spigeliæ Radix	Spigelia Marilandica	*Root of the Indian Pink*	Anthelmintic, cathartic	gr. x. to ℈j.
Spiritus rectificatus	....	*Rectified Spirit*	*Its specific gravity is to that of Distilled Water as .835 to 1.000*	....
Spiritus tenuior	....	*Proof Spirit*	*Its specific gravity is to that of Distilled Water as .930 to 1.000*	stimulant
Spongia usta	Spongia Officinalis	*Sponge*	Deobstruent, tonic	ʒj. to ℥ss.
Stannum	*Tin Filings*	*Tin*	....	....
Staphisagriæ Semina	Delphinium Staphisagria	*Seeds of Stavesacre*	Violent emetic, cathartic	gr. ij. to gr. x.
Styracis Balsamum	Styrax Officinale	*Balsam of Storax*	Expectorant, stimulant	gr. x. to ʒss.
Succinum	....	*Amber*	....	....
Sulphur	....	*Sulphur*	....	....
Sulphur Sublimatum	....	*Sublimed Sulphur*	....	....
TABACI Folia	Nicotiana Tabacum	*Leaves of Tobacco*	Expectorant, narcotic	gr. x. to gr. v.
Tamarindi Pulpa	Tamarindus Indica	*The Pulp of the Tamarind*	Laxative, refrigerant	ʒss. to ℥iv.
Taraxici Radix	Leontodon Taraxicum	*Root of the Dandelion*	Diuretic, aperient	ʒss. to ℥j.
Tartarum	Potassæ Supertartras impura	*Tartar*	....	....

Terebinthina Canadensis	Pinus Balsamea	*Canadian Turpentine*	Stimulant, diuretic	℈j. to ʒj.
Terebinthina Chia	Pistacia Terebinthus	*Cyprus Turpentine*	Stimulant, diuretic	℈j. to ʒj.
Terebinthina vulgaris	Pinus Sylvestris	*Common Turpentine*	(*In glisters*)	ʒij. to ℥j.
Terebinthinæ Oleum	Pinus Sylvestris	*Oil of Turpentine*	Diuretic, stimulant	♏ x to fʒss.
Testæ	Ostrea Edulis	*(Oyster) Shells*	Absorbent, antacid	ʒss. to ʒij.
Tormentillæ Radix	Tormentilla Officinalis	*Root of Tormentil*	Astringent	gr. x. to ʒss.
Toxicodendri Folia	Rhus Toxicodendron	*Leaves of Sumach*	Stimulant, narcotic	gr. ij. to gr. v.
Tragacantha	Astragalus verus	*Tragacanth*	Demulcent	gr. x. to ʒj.
Tussilago	Tussilago Farfara	*Coltsfoot*	Expectorant	ʒss. to ʒj.
VALERIANÆ Radix	Valeriana Officinalis, (Sylvestris)	*Root of Valerian*	Antispasmodic, stimulant	℈j. to ʒj.
Veratri Radix	Veratrum Album	*Root of White Hellebore*	Violent cathartic, emetic	gr. ij. to gr. v.
Vinum	Vinum Album Hispanicum	*Wine*	…………	……..
Ulmi Cortex	Ulmus Campestris	*Bark of the Elm*	Diuretic, astringent, tonic,	℈j. to ʒj.
Uvæ Passæ	Vitis Vinifera	*Raisins*	…………	……..
Uvæ Ursi Folia	Arbutus Uva Ursi	*Leaves of the Whortleberry*	Tonic, diuretic, astringent	gr. x. to ʒj.
ZINCUM	Zincum	*Zinc*	…………	……..
Zingiberis Radix	Zingiber Officinale	*Ginger Root*	Stomachic, carminative	gr. v. to ʒss.

PREPARATIONS AND COMPOUNDS,

WITH THE VIRTUES AND PROPER DOSES AFFIXED TO EACH.

ACETUM Colchici	Vinegar of Meadow Saffron	Expectorant, diuretic	fʒss. to fʒij.
——— Scillæ	——— Squills	Expectorant, diuretic, emetic	fʒss. to fʒij.
Acidum Aceticum	Acetic Acid	Antiseptic, antinarcotic	fʒj. to f℥ss.
——— Benzoicum	Benzöic Acid	Expectorant, stimulant	gr. v. to gr. xv.
——— Citricum	Citric Acid	Antiseptic, refrigerant	gr. x. to ʒij.
——— Muriaticum	Muriatic Acid	Tonic, antiseptic	♏v. to xx.
——— Nitricum dilutum	Diluted Nitric Acid	Antisyphilitic, antiseptic	♏v. to fʒss.
——— Sulphuricum dilutum	Diluted Sulphuric Acid	Antiseptic, tonic, astringent, refrigerant	♏v. to fʒss.
Æther rectificatus	Rectified Æther	Antispasmodic, stimulant. narcotic	♏xx. to fʒss.

Ammoniæ Subcarbonas	Subcarbonate of Ammonia	Stimulant, antacid, antispasmodic, diaphoretic	gr. v. to gr. xv.
Antimonii Oxydum	Oxide of Antimony	Alterative, diaphoretic	gr. $\frac{1}{4}$ to gr. j.
——— Sulphuretum præcipitatum	Precipitated Sulphuret of Antimony	Alterative, diaphoretic, emetic	gr. j. to gr. v.
Antimonium tartarizatum	Tartarized Antimony	Emetic	gr. j. to gr. iij.
		Diaphoretic, expectorant	gr. $\frac{1}{8}$ to gr. $\frac{1}{2}$
Aqua Anethi	Dill Water	Carminative	f℥j. to f℥ij.
—— Carui	Carraway Water	Stomachic, carminative	f℥j. to f℥ij.
—— Cinnamomi	Cinnamon Water	Stomachic, cordial	
—— Fœniculi	Fennel Water	Cordial	f℥j. to ℥ij.
—— Menthæ Piperitæ	Peppermint Water	Carminative	f℥j. to f℥iij.
——— Viridis	Spearmint Water	Carminative	f℥ss. to f℥ij.
—— Pimentæ	Pimenta Water	Carminative, cordial	f℥ss. to f℥ij.
—— Pulegii	Pennyroyal Water	Cordial, stimulant	f℥ss. to f℥iss.
Argenti Nitras	Nitrate of Silver	Tonic, antispasmodic	gr. $\frac{1}{8}$ to gr. iij.
CONFECTIO Aromatica	Confection, Aromatic	Stimulant, cordial	gr. v. to ʒj.
——— Amygdalarum	——— of Almonds	Demulcent	*ad libitum*
——— Aurantiorum	——— Orange Peel	Tonic, stomachic	ʒj. to ℥j.
——— Cassiæ	——— Cassia	Laxative	ʒj. to ℥j.
——— Opii	——— Opium	Anodyne, stimulant	gr. x. to gr. xxxvj.
——— Rosæ Caninæ	——— Dog Rose	Cooling	*ad libitum*
——— Gallicæ	——— Red Rose	Astringent, tonic	ʒj. to ℥j.

Confectio Rutæ	Confection of Rue	Anthelmintic, antispasmodic (used in glisters)	ʒj. to ʒij.
——— Scammoniæ	——— Scammony	Cathartic	gr. x. to ʒij.
——— Sennæ	——— Senna	Cathartic	ʒj to ℥ss.
Cornu ustum	Burnt Hartshorn	Absorbent	℈j. to ʒss.
Creta præparata	Prepared Chalk	Antacid, absorbent	
Cuprum Ammoniatum	Ammoniated Copper	Antispasmodic, tonic	gr. ¼ to gr. v.
DECOCTUM Cinchonæ	Decoction of Bark	Tonic, febrifuge	f℥iss. to f℥iv.
——— Alöes Compositum	———, Compound, of Aloes	Cathartic, emmenagogue	f℥ss. to f℥ij.
——— Cydoniæ	——— of Quince Seeds	Demulcent	f℥j. to f℥iv.
——— Dulcamaræ	——— of Bitter Sweet	Diuretic, diaphoretic	f℥ss. to f℥ij.
——— Hordei	——— of Barley	Demulcent, nutritive	*ad libitum*
——— Hordei Compositum	———, Compound, of Barley	Demulcent, laxative	*ad libitum*
——— Lichenis	——— of Liverwort	Tonic, demulcent	f℥j. to f℥iv.
——— Sarsaparillæ Compositum	———, Compound, of Sarsaparilla	Diaphoretic, alterative	f℥iv. to f℥viij.
——— Sarsaparillæ	——— of Sarsaparilla	Diaphoretic, demulcent	℥iv. to ℥viij.
——— Senegæ	——— of Senega	Diuretic, stimulant	f℥ss. to f℥iij.
——— Ulmi	——— of Elm Bark	Diuretic, alterative	f℥ij. to f℥vj.
EXTRACTUM Aconiti	Extract of Aconite	Narcotic, stimulant	gr. j. to gr. v.

Extractum Aloës purificatum	Extract of Purified Aloes	Cathartic, emmenagogue	gr. v. to gr. x.
—— Anthemidis	—— of Chamomile	Stomachic, tonic	gr. x. to xx.
—— Belladonnæ	—— of Deadly Nightshade	Diuretic, narcotic	gr. $\frac{1}{4}$ to gr. v.
—— Cinchonæ	—— of Cinchona Bark	Tonic	gr. v. to ℈j.
—— Cinchonæ resinosum	—— resinous	Tonic	
—— Colocynthidis	—— of Colocynth	Cathartic	gr. v. to ʒss.
—— Colocynthidis Compositum	——, compound	Cathartic, stimulant	gr. v. to ʒss.
—— Conii	—— of Hemlock	Alterative, narcotic	gr. j. to gr. xx.
—— Elaterii	—— of Elaterium	Powerful cathartic	gr. $\frac{1}{4}$ to gr. ij.
—— Gentianæ	—— of Gentian	Tonic, stomachic	gr. x. to ℈j.
—— Glycyrrhizæ	—— of Liquorice	Demulcent	ʒj. to ʒij.
—— Hæmatoxyli	—— of Logwood	Astringent	gr. v. to ʒss.
—— Humuli	—— of Hops	Tonic, anodyne	gr. x. to ʒss.
—— Jalapæ	—— of Jalap	Cathartic	gr. x. to ʒss.
—— Opii	—— of Opium	Narcotic, anodyne, sedative, antispasmodic	gr. ss. to gr. v.
—— Papaveris	—— of White Poppy	Narcotic, anodyne	gr. ij. to ℈j.
—— Rhei	—— of Rhubarb	Astringent, cathartic	gr. v. to ʒss.
—— Sarsaparillæ	—— of Sarsaparilla	Alterative, diaphoretic	gr. x. to ʒij.
—— Taraxaci	—— of Dandelion	Diuretic, deobstruent	gr. x. to ʒj.

FERRI Sub-carbonas	Subcarbonate of Iron	Tonic, emmenagogue	gr. iij. to gr. xx.
——— Sulphas	Sulphate of Iron	Tonic, anthelmintic	gr. ij. to gr. vj.
Ferrum Ammoniatum	Ammoniated Iron	Emmenagogue, tonic	gr. v. to gr. xv.
——— Tartarizatum	Tartarized Iron	Tonic, deobstruent	gr. v. to gr. xx.
HYDRARGYRI Nitrico-Oxydum	Nitric Oxide of Mercury	Used externally	…………..
——— Oxydum Cinereum	Grey Oxide of Mercury	Antisyphilitic, stimulant	gr. i. to gr. iij.
——— Oxydum Rubrum	Red Oxide of Mercury	Antisyphilitic	gr. $\frac{1}{4}$ to gr. ii.
——— Oxymurias	Oxymuriate of Mercury	Antisyphilitic, alterative	gr. $\frac{1}{8}$ to gr. j.
——— Submurias	Submuriate of Mercury	Alterative, antisyphilitic	gr. i. to gr. ij.
——— Submurias	Ditto ditto	Cathartic	gr. iij. to gr. x.
——— Sulphuretum nigrum	Black Sulphuret of Mercury	Alterative	gr. v. to ℈j.
——— rubrum	Red Sulphuret of Mercury	Antisyphilitic	gr. v. to ℈j.
Hydrargyrum præcipitatum Album	White precipitated Mercury	Externally used as detergent	…………..
——— cum creta	Mercury, with Chalk	Alterative, antisyphilitic	gr. v. to ʒss.
INFUSUM Anthemidis	Infusion of Chamomile	Tonic, stomachic, emetic if taken warm	f℥j. to f℥ij.
——— Armoraciæ Compositum	——— of Horseradish	Diuretic, stimulant	f℥ss. to f℥iij.

Infusum Aurantii Compositum	Infusion, Compound, of Orange Peel	Stomachic, tonic, stimulant carminative	f℥j. to f℥iij.
——— Calumbæ	——— of Calumba	Tonic	
——— Caryophyllorum	——— of Cloves	Aromatic, stimulant	
——— Cascarillæ	——— of Cascarilla	Tonic, stomachic	
——— Catechu Compositum	———, Compound, of Catechu	Astringent, stomachic	
——— Cinchonæ	——— of Bark	Febrifuge, tonic	
——— Cuspariæ	——— of Cusparia	Antiseptic, tonic	
——— Digitalis	——— of Foxglove	Narcotic, sedative, duretic	f℥ss. to ℥iss.
——— Gentianæ Compositum	———, Compound, of Gentian	Stomachic, tonic	f℥ss. to ℥iij.
——— Lini	——— of Linseed	Demulcent	
——— Quassiæ	——— of Quassia	Tonic, antiseptic	
——— Rhei	——— of Rhubarb	Cathartic, stomachic	
——— Rosæ	——— of Roses	Astringent, refrigerent	
——— Sennæ	——— of Senna	Cathartic	
——— Simaroubæ	——— of Simarouba	Tonic, antiseptic	
——— Tabaci	——— of Tobacco	Sedative antispasmodic (used in clysters)	f℥ij.
LIQUOR Ammoniæ	Liquor of Ammonia	Antacid, stimulant	♏v. to ♏xv.
——— Acetatis	——— of Acetate of Ammonia	Diaphoretic	fʒj. to f℥j.

Liquor Ammoniæ Subcarbonatis	Liquor of Subcarbonate of Ammonia	Stimulant, antacid, diaphoretic	fʒss. to fʒj.
—— Antimonii tartarizati	—— of tartarized Antimony	Diaphoretic, expectorant Emetic	♏v. to fʒj. fʒiij. to fʒj.
—— Arsenicalis	—— Arsenic	Tonic, (Used in Agues)	♏ij. to ♏xij.
—— Calcis	—— Lime	Astringent, antacid	f℥j. to ℥viij.
—— Ferri Alkalini	—— Alkaline Iron	Tonic	fʒss. to fʒj.
—— Hydrargyri Oxymuriatis	—— Oxymuriate of Mercury	Alterative, antisyphilitic	fʒj. to fʒiij.
—— Potassæ	—— Potass	Lithontriptic, antacid	♏viij. to fʒss.
—— Potassæ Subcarbonatis	—— Subcarbonate of Potass	Antacid, duretic	♏x. to fʒss.
MAGNESIA	Magnesia	Laxative, antacid	gr. x. to ʒij.
Magnesiæ Carbonas	Carbonate of Magnesia	Antacid, cathartic	℈j. to ʒij
—— Sulphas	Sulphate of Magnesia	Cathartic	ʒij. to ℥iss.
Mel Boracis	Honey of Borax	Detergent	....
—— despumatum	Clarified Honey	Aperient	ʒij. to ℥ij.
—— Rosæ	Honey of Roses	Astringent (*given to children*)	fʒj. to f℥ss.
Mistura Ammoniaci	Mixture of Ammoniac	Expectorant antispasmodic	f℥ss. to f℥iss.
—— Amygdalarum	—— Almonds	Demulcent	f℥j to ℥viij.
—— Assafœtida	—— Assafœtida	Antispasmodic, expectorant	f℥ss. to f℥iss.
—— Camphoræ	—— Camphor	Diaphoretic, anodyne	f℥ij. to f℥iv.
—— Cornu Usti	—— Burnt Hartshorn	Absorbent	*ad libitum*

Mistura Cretæ	Mixture of Chalk	Astringent, absorbent, antacid	f℥j. to f℥ij.
—— Ferri Composita	——, Compound of Iron	Tonic, emmenagogue	f℥j. to f℥ij.
—— Guaiaci	—— of Guaiacum	Diaphoretic, stimulant	f℥ss. to f℥ij.
—— Moschi	—— Musk	Antispasmodic, stimulant, diaphoretic	f℥ss. to f℥ij.
Mucilago Acaciæ	Mucilage of Acacia	Demulcent	fʒj. to f℥j.
—— Amyli	—— Starch	Demulcent (as a glyster)	(f℥iv. to f℥viij.)
OLEUM Amygdalæ	Oil of Almonds	Demulcent, emollient	fʒss. to f℥j.
—— Anisi	—— Aniseed	Carminative, stimulant	♏ij. to ♏x.
—— Anthemidis	—— Chamomile	Antispasmodic, stimulant, diaphoretic	♏iij. to mx.
—— Carui	—— Carraway	Carminative	♏ij. to ♏v.
—— Juniperi	—— Juniper	Diuretic, stimulant	♏iij. to ♏x.
—— Lavendulæ	—— Lavender	Stimulant	♏j. to ♏v.
—— Lini	—— Linseed	Demulcent	fʒij. to f℥ss.
—— Menthæ piperitæ	—— Peppermint	Stomachic, carminative	♏j. to ♏iij.
—— —— Viridis	—— Spearmint	Stomachic, carminative	♏j. to ♏iij.
—— Origani	—— Origanum	Narcotic, stimulant	mss. to ♏j.
—— Pimentæ	—— Pimenta	Stomachic, stimulant	♏j. to ♏iv.
—— Pulegii	—— Pennyroyal	Antispasmodic, stimulant	♏j. to ♏v.
—— Ricini	—— Castor	Cathartic	fʒij. to f℥iss.
—— Rosmarini	—— Rosemary	Stimulant	♏ij. to ♏iv.
—— Succini	—— Amber	Antispasmodic, stimulant	♏ij. to ♏x.
—— Sulphuratum	—— Sulphurated	Stimulant	♏v. to ♏xx.

Oleum Terebinthinæ rectificatum	Oil of Turpentine rectified	Stimulant, diuretic, anthelmintic	♏x. to fʒj.
Olivæ Oleum	Olive Oil	Demulcent, emollient	fʒj. to f℥ss.
Oxymel Simplex	Simple Oxymel	Diaphoretic	fʒj. to f℥j.
——— Scillæ	Oxymel of Squills	Expectorant, diuretic	fʒss. to f℥ij.
PILULÆ Aloës cum Myrrha	Pills of Aloes with Myrrh	Cathartic, emmenagogue	gr. x. to ℈j.
——— ——— Compositæ	———, Compound, of Aloes	Cathartic, stomachic	gr. x. to ℈j.
——— Cambogiæ Compositæ	——————— Gamboge	Anthelmintic cathartic	gr. v. to ℈j.
——— Ferri cum Myrrha	——— of Iron with Myrrh	Tonic, emmenagogue	gr. v. to ℈j.
——— Galbani Compositæ	———, Compound, of Galbanum	Antispasmodic	gr. iv. to ℈j.
——— Hydrargyri	——— of Quicksilver	Alterative, antisyphilitic Purgative	gr. ij. to gr. x. x. to ℈j.
——————— Submuriatis Compositæ	———, Compound, of Submuriate of Mercury	Alterative	gr. v. to gr. x.
——— Saponis cum Opio	——— of Soap with Opium	Anodyne, narcotic	gr. ij. to vj.
——— Scillæ Compositæ	———, Compound, of Squills	Expectorant, diuretic	gr. v. to gr. x.
Plumbi Superacetas	Superacetate of Lead	Astringent	gr. ss. to gr. ij.
Potassæ Acetas	Acetate of Potass	Diuretic, deobstruent	gr. x. to ʒj.
——— Carbonas	Carbonate of Potass	Diuretic, antacid	gr. x. to ʒss.
——— Nitras	Nitrate of Potass	Diaphoretic, refrigerant, diuretic	gr. x. to ʒss.
——— Subcarbonas	Subcarbonate of Potass	Antacid, diuretic	gr. x. to ʒss.

Potassæ Sulphas	Sulphate of Potass	Cathartic, deobstruent	ʒss. to ʒiij.
—— Sulphuretum	Sulphuret of Potass	Diaphoretic, expectorant	gr. iij. to ℈j.
—— Supersulphas	Supersulphate of Potass	Cathartic, cooling	ʒss. to ʒij.
—— Supertartras	Supertartrate of Potass	Cathartic, refrigerant	ʒij. to ʒiv.
—— Tartras	Tartrate of Potass	Cathartic	℈j. to ʒvi.
Pulvis Aloës Compositus	Compound Powder of Aloes	Cathartic, stomachic	gr. v. to ʒss.
—— Antimonialis	Powder, Antimonial	Alterative, diaphoretic	gr. iij. to gr. x.
—— Cinnamomi Compositus	——, Compound of Cinnamon	Carminative, stomachic	gr. v. to ℈j.
—— Contrajervæ Compositus	—— Contrayerva	Diaphoretic, stimulant	gr. x. to ʒj.
—— Cornu usti cum Opio	—— of Burnt Hartshorn with Opium	Anodyne, absorbent	gr. iij. to gr. xv.
—— Cretæ Compositus	——, Compound, of Chalk	Absorbent, antacid	gr. x. to ℈j.
—— Ipecacuanhæ Compositus	—— Ipecacuanha	Anodyne, sudorific	gr. v. to ℈j.
—— Cretæ Compositus cum Opio	—— of Chalk and Opium	Anodyne, astringent, absorbent	gr. x. to ℈ij.
—— Kino Compositus	——, Compound, of Kino	Anodyne, astringent	gr. v. to ℈j.
—— Scammoneæ Compositus	—— Scammony	Cathartic	gr. x. to ℈j.
—— Sennæ Compositus	—— Senna	Cathartic, hydragogue	gr. x. to ℈ij.
—— Tragacanthæ Compositus	—— Tragacanth	Demulcent,	gr. x. to ʒiij.

SODA Tartarizata	Tartarized Soda	Cathartic	ʒij. to ʒvj.
Sodæ Carbonas	Carbonate of Soda	Antacid	gr. x. to ʒj.
—— Subcarbonas	Subcarbonate of Soda	Antacid, diuretic	gr. v. to ʒss.
———— exsiccata	———— dried	Lithontriptic, antacid	gr. v. to ʒss.
—— Sulphas	Sulphate of Soda	Cathartic	ʒij. to ℥iss.
Spiritus Ætheris aromaticus	Aromatic Spirit of Æther	Stimulant	fʒss. to fʒij.
———— Nitrici	Nitric Spirit of Æther	Diuretic, antispasmodic, refrigerant	♏x. to fʒij.
———— Sulphurici	Sulphuric Spirit of Æther	Antispasmodic, stimulant	♏xx. to fʒij.
———— Compositus	Compound Spirit of Æther	Cordial, stimulant	fʒss. to fʒij.
—— Ammoniæ	Spirit of Ammonia	Diaphoretic, stimulant, antispasmodic	fʒss. to fʒij.
———— aromaticus	Aromatic Spirit of Ammonia	Stimulant, antispasmodic,	fʒss. to fʒi.
———— fœtidus	Fœtid Spirit of Ammonia	Antispasmodic, stimulant	fʒss. to fʒi.
———— succinatus	Succinated Spirit of Ammonia	Antispasmodic, stimulant	♏x. to fʒi.
—— Anisi	Spirit of Aniseed	Carminative, stimulant	fʒij. to fʒiij.
—— Armoraciæ Compositus	Compound Spirit of Horseradish	Antiscorbutic, stimulant	fʒij. to f℥ss.
—— Carui	Spirit of Carraway	Carminative	fʒij. to f℥ss.
—— Cinnamomi	—— Cinnamon	Stimulant, stomachic	fʒij. to f℥ss.

Spiritus Juniperi Compositus	Spirit of Juniper	Diuretic, stimulant	fʒij. to f℥ss.
—— Lavendulæ Compositus	——, Compound, of Lavender	Stimulant	mxx. to fʒij.
—— Menthæ piperitæ	—— of Peppermint	Carminative, stimulant	fʒj. to fʒiij.
—— —— viridis	—— Spearmint	Carminative, stimulant	fʒj. to fʒij.
—— Myristicæ	—— Nutmeg	Cordial, carminative	fʒij. to fʒiv.
—— Pimentæ	—— Pimenta	Carminative, stomachic	fʒj. to fʒiv.
—— Pulegii	—— Pennyroyal	Carminative, stimulant	fʒj. to fʒiv.
—— Rosmarini	—— Rosemary	Cordial, stimulant	fʒss. to fʒiv.
Sulphur præcipitatum	Precipitated Sulphur	Cathartic, diaphoretic	℈j. to ʒij.
Syrupus Althææ	Syrup of Marshmallows	Demulcent	fʒj. to f℥ss.
—— Aurantiorum	—— of Orange Peel	Tonic, stomachic	fʒj. to f℥ss.
—— Croci	—— of Saffron	Cordial	fʒj. to ℥j.
—— Limonum	—— of Lemons	Antiseptic, refrigerant	fʒj. to f℥ss.
—— Mori	—— of Mulberry	Cooling	fʒj. to f℥ss.
—— Papaveris	—— of Poppy	Anodyne	fʒj. to fʒiv.
—— Rhamni	—— of Buckthorn	Cathartic	fʒiv. to f℥ij.
—— Rosæ	—— of Roses	Laxative	fʒss. to f℥j.
—— Sennæ	—— of Senna	Cathartic	fʒj. to f℥j.
—— Tolutanus	—— of Tolu	Expectorant	fʒj. to f℥ss.
—— Zingiberis	—— of Ginger	Stomachic, carminative	fʒj. to fʒiij.
TINCTURA Alöes Composita	Compound Tincture of Aloes	Cathartic, emmenagogue stomachic	fʒss to fʒiij.

Tinctura Aloës	Tincture of Aloes	Tonic, emmenagogue	fʒij. to f℥j.
——— Assafœtidæ	——— of Assafœtida	Antispasmodic	fʒss. to fʒij.
——— Aurantii	——— of Orange Peel	Tonic, stomachic	fʒj. to f℥ss.
——— Benzöini Composita	———, Compound, of Benzoin	Antispasmodic, expectorant	fʒss. to fʒij.
——— Calumbæ	——— of Calumba	Tonic, stomachic	fʒj. to f℥ss.
——— Camphoræ Composita	———, Compound, of Camphor	Diaphoretic, anodyne	♏xx. to f℥ss.
——— Capsici	——— of Capsicum	Stomachic, stimulant	fʒj. to fʒiij.
——— Cardamomi	——— of Cardamoms	Cordial, stimulant	fʒj. to f℥ss.
——— ——— Composita	———, Compound, of Cardamoms	Cordial, stomachic Carminative	fʒj. to f℥ss.
——— Cascarillæ	——— of Cascarilla	Tonic, stomachic	fʒj. to f℥ss.
——— Castorei	——— of Castor	Antispasmodic, tonic	fʒss. to fʒij.
——— Catechu	——— of Catechu	Astringent	fʒj. to fʒiij.
——— Cinchonæ	——— of Bark	Tonic, stomachic	fʒj. to f℥ss.
——— ——— Ammoniata	Ammoniated Tincture of Bark	Tonic, stimulant	♏xx. to fʒij.
——— ——— Composita	Compound Tincture of Bark	Tonic, stomachic	fʒj. to f℥ss.
——— Cinnamomi	Tincture of Cinnamon	Aromatic, astringent	fʒj. to fʒiij.
——— ——— Composita	———, Compound, of Cinnamon	Stomachic, cordial	fʒj. to f℥ss.
——— Digitalis	——— of Foxglove	Narcotic, diuretic, sedative	♏j. to ♏xl.

Tinctura Ferri Ammoniacalis	Tincture of Iron, ammoniated	Tonic, emmenagogue	♏x. to fʒj.
—— Ferri Muriatis	—— of Muriate of Iron	Tonic, antispasmodic	♏x. to fʒj.
—— Gentianæ Composita	Compound Tincture of Gentian	Stomachic, tonic	fʒj. to f℥j.
—— Guaiaci	Tincture of Guaiacum	Stimulant, diaphoretic	fʒj. to f℥ss.
—— Ammoniata	Ammoniated Tincture of Guaiacum	Diaphoretic, antispasmodic	♏xx. to fʒij.
—— Hellebori nigri	Tincture of Black Hellebore	Emmenagogue	♏xx. to fʒj.
—— Humuli	—— of Hops	Tonic, sedative	fʒj. to f℥ss.
—— Hyoscyami	—— of Henbane	Narcotic, anodyne	♏x. to ʒj.
—— Jalapæ	—— of Jalap	Cathartic	fʒj. to fʒvj.
—— Kino	—— of Kino	Astringent	fʒj. to fʒiv.
—— Lyttæ	—— of Cantharides	Stimulant, diuretic	♏x. to fʒj.
—— Myrrhæ	—— of Myrrh	Deobstruent, tonic	♏xx. to fʒj.
—— Opii	—— of Opium	Anodyne	♏x. to ♏lx.
—— Rhei	—— of Rhubarb	Cathartic, stomachic	fʒj. to f℥i.
—— Rhei Compositæ	——, Compound, of Rhubarb	Cathartic, stomachic	fʒj. to f℥i.
—— Scillæ	—— of Squills	Diuretic, expectorant, emetic	♏x. to fʒss.
—— Sennæ	—— of Senna	Cathartic, stomachic	fʒiv. to f℥iss.
—— Serpentariæ	—— of Serpentary	Sudorific, stimulant	fʒj. to fʒij.
—— Valerianæ	—— of Valerian	Antispasmodic, stimulant	fʒss. to fʒij.

Tinctura Valerianæ Ammoniata	Tincture of Valerian, ammoniated	Antispasmodic, stimulant	♏xx. to fʒij.
——— Zingiberis	——— of Ginger	Stomachic, carminative	fʒss. to fʒij.
VINUM Alöes	Wine of Aloes	Cathartic, stomachic	fʒiv. to f℥j.
——— Ferri	—— of Iron	Tonic, astringent	fʒj. to f℥ss.
——— Ipecacuanhæ	—— of Ipecacuanha	Emetic, or	fʒij. to f℥j.
		Diaphoretic	♏x. to ♏xxx.
——— Opii	—— of Opium	Anodyne, narcotic	♏x. to fʒj.
ZINCI Oxydum	Oxide of Zinc	Tonic, antispasmodic	gr. j. to v.
——— Sulphas	Sulphate of Zinc	{ Emetic	gr. x. to ℈j.
		{ Tonic, astringent	gr. ss. to iij.

LONDON:
PRINTED BY COX AND BAYLIS, GREAT QUEEN STREET,
LINCOLN'S-INN FIELDS.